

# IQLR

International QL Report

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ISSN 1078-5787

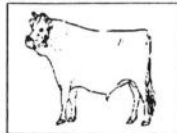
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Volume 5 Issue 5  
January/February  
1996

**NEW**

*From The Mind of Dilwyn Jones*



SCREEN1\_SCR



SCREEN2\_SCR



SCREEN3\_SCR



SCREEN4\_SCR



SCREEN5\_SCR



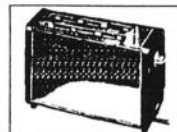
SCREEN6\_SCR



SCREEN7\_SCR



SCREEN8\_SCR



SCREEN9\_SCR

*Mini Graphics Printer*

*(A MUST for all Clipart Collectors)*

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# IQLR.....

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Issue 1	10 April
Issue 2	10 June
Issue 3	10 August
Issue 4	10 October
Issue 5	10 December
Issue 6	10 February

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# SMSQ Modules

Le Grand Pressigny, FRANCE - Tony Tebby

**Principles:** SMSQ/E is delivered as a single file which provides an operating system, a command line processor / program interpreter (SBASIC), various language modules and a complete set of device drivers for the target system. SMSQ/E is, however, not a monolithic unit, but a collection of modules providing different functions. It is possible, for example, to remove the SBASIC interpreter and replace it by a UNIX shell, or to remove unwanted language modules or replace them by other languages.

In current versions, SMSQ is not very finely divided: to avoid duplication of utility routines, the device drivers are linked together into large modules and the operating system itself is delivered as a single module. The QXL version has 14 modules, the GOLD card has 20 modules and the Atari 17 modules.

Not all modules are loaded. For the Atari version, for example, there are two different operating system modules to allow for the two different memory management schemes. Only one of these is loaded, the other is thrown away during loading.

**Module Structure:** The standard module structure comprises a standardised header, module preprocessing code and the module code itself. Only the module code itself is loaded.

**Module Header:** The standard module header starts with a compulsory fixed size block of header information: 24 bytes long.

Long word	mbase	the offset from the start of the header to the base of the module = the length of the header
Long word	mlength	the length of the module itself (not including the header)
Long word	rlength	the maximum length after relocation (the module may shrink!)
Long word	cksum	the module checksum
Long word	select	the offset from the start of the header to the "select code" which will be called before the module is loaded.
Byte	level	the module level (for automatic loading)
Byte	spare	
Word	name	relative word pointer to the module name.

**All lengths and relative pointers must be even.**

The "level" is reserved for future use. It should always be 1. The name should always be given. It is a QDOS string (word length followed by the characters which should be padded to an even number). As the name will usually follow the header directly, the relative pointer will usually be 2. As a convention, the name should be followed by 4 character version identification (often this is just four spaces). The checksum is usually calculated in the following way:

Initialise long word checksum to zero

For each word in the module

add word to long word checksum  
rotate the long word checksum right by (word MOD 7)

```

    moveq    #0,d0
    moveq    #0,d1
loop
    move.w   (a1)+,d0      next long word
    add.l    d0,d1         accumulated
    and.w    #7,d0        MOD 7
    ror.l    d0,d1        rotate
```

## SMSQ Modules - (cont'd)

subq.l            #2,d3                    decrement byte count by 2  
bgt.s loop

*A checksum of zero is always acceptable and is easier to calculate.*

As a module has a checksum, it is not possible to incorporate configurable data. To sidestep this problem, any configuration blocks should be put in the header and a "select" routine incorporated to copy the information to the module. (This also ensures that the module is not cluttered up with configuration text.)

Although the select routine can be used to perform much more than simple selection, the main purpose of the selection routine is to determine whether a particular module should be loaded.

The first "active" module of each version of the operating system is the loader. This is the module which scans the rest of the modules loading the code into the "right" places etc. For each module, it calls the "select" routine (if the offset is not zero) in supervisor mode. The select routine must return a code in D0:

D0 0 do not load this module  
D0 1 load this module.

Thus, for example, the monochrome display driver for the Atari checks whether a monochrome display is connected and, if it is, it returns 1 (load) to ensure that the monochrom screen driver is loaded. Conversely, the Atari QL emulator display drivers return 0 (no-load) if there is a monochrome display attached and so, unless you have a version of SMSQ/E which includes a monochrome driver, you will get no console driver at all.

The select routines can, naturally, do more than this. Cache handling modules, for example, do not have any real module: the cache handling code for the various MC680x0 processors is built into the header and the code for the particular processor required is copied into the SMSQ vector area. The cache handling select routines, therefore, always return 0 (no-load).

The loader passes the address of a "select routine communication block" to each select routines. This block is initialised with a certain amount of useful data by the loader, but select routines can use it to pass information from one to another. This communication block is pointed to by A5.

Long word	family	Machine family ID (ATST, QXL, GOLD)
Long word	mtype	Machine type (depends on family but the MSB is always the processor type \$00=68000, \$40=68040)
Word	lang	Language identifier (or 0)
Word	spare	
Long word	facility	32 bits, each of which may be set to indicate that a particular facility has already been loaded (to prevent, for example, two conflicting CON drivers being loaded. SMSQ currently only uses bits 30 and 31. Other software suppliers should use bit 0 upwards.

Select routines may use up to \$30 bytes after this defined block. Note, however, that these \$30 bytes are not initialised. Select routines may not use any operating system facilities (they are called before the operating system is initialised).

**Module Code:** When all modules have been loaded, SMSQ calls the module code itself, in user mode, to initialise the modules (link in drivers, add SBASIC procedures and Things). The module code should return with RTS. It is in the same form as a file which is intended to be LRESPRed. Note, however, that when modules are initialised, channel 0 is not open.

**Host Module:** It would have been very convenient to have a module structure which was the same for all modules, but, as SMSQ/E has to start off as a program which executes under a different operating system, the whole of the SMSQ/E operating system file has to appear to be a valid program on that system. For this reason, there is one special module: the HOST MODULE.

## SMSQ Modules - (cont'd)

The host module does not include any code which will be loaded. It is the program which will be executed by the HOST operating system. For the GOLD card it just enters supervisor mode and waits for 2.5 seconds before jumping to the GOLD card loader module.

It is clear that it is impossible to have a header on a host module. The host module, therefore has a trailer! In order to be able to find the trailer, it is always put at the end of the file - all the other modules are inserted between the host module and the trailer. This trailer is \$18 bytes long and in the same form as standard module header. There are, however, some slight differences in content.

Long word	mbase	0
Long word	mlength	the length of the module itself (not including the trailer)
Long word	rlength	0
Long word	cksum	the module checksum
Long word	flength	the offset from the start of the module to the "file length fixup table".
Long word	oslen	length of OS file or 0

The file length fixup table is required to tell the host operating system how long the file is by putting the length (plus or minus a bit) into the host program (YES, SOME OPERATING SYSTEMS DO NOT KNOW HOW LONG A PROGRAM IS!!). If this pointer is non zero it points to a table of two long word entries in the form:

Relative pointer to long word to be overwritten.  
Adjustment to add to the length before overwriting.

The table is terminated by a zero long word pointer.

Life is even worse for the QXL. The whole file is prefaced by an MSDOS program. In order to find the "true" start of the OS file, length of the OS file is stored as the last long word. Moreover, if the length of the SMSQE.EXE file is changed not only does this length need to be updated, but a complex patch to the MSDOS program is required (the calculation seems illogical, but I am assured that it is correct). This may be done after all operations are complete.

```
OPEN #5,smsqe.exe
lenf = FLEN (#5)
lens% = INT ((lenf+511) / 512)
lenb% = lenf - lens% * 512
IF lenb% = lenb% = lenb% + 512
BPUT #5\2, lenb% MOD 256, lenb% DIV 256, lens% MOD 256, lens% DIV 256
CLOSE #5
```

**Scanning an SMSQ OS File:** An SMSQ file can be scanned fairly easily with a simple SBASIC program

```
100 REMark - scan bootloader file
110 DIM version$(4): version$(0)=4
120 OPEN #0, CON: CLS: BORDER 1,4
130 height = 17
140 INPUT 'SMSQ file> ';f$
150 OPEN_IN #3,f$
160 fln = FLEN(#3)
170 LGET #3\fln-$18+$4, mod_ptr : REMark - get length of host module
180 LGET #3\fln-$18+$14, bln : REMark - length of bootloader file
190 IF bln: mod_ptr = mod_ptr + fln - bln
200 FOR i=1 to 9999
210 LGET #3\((mod_ptr),mbase,mlength
220 IF NOT mbase: EXIT : REMark - end of file
230 IF NOT i mod height: INPUT a$: : REMark - pause at screen full
240 WGET #3\((mod_ptr + $16),name_rel : REMark - relative pointer to name
```

## SMSQ Modules - (cont'd)

```
240 WGET #3(mod_ptr + $16),name_rel           : REMark - relative pointer to name
250 GET #3(mod_ptr+$16+name_rel),name$       : REMark - fetch module name
260 IF LEN (name$) && 1: BGET #3,a           : REMark - odd length name is padded
270 BGET #3,version$(1 TO 4)                 : REMark - get version, if any
280 PRINT HEX$(mlength,24) !! version$ ! name$
290 mod_ptr = mod_ptr + mbase + mlength
300 END FOR i
310 CLOSE #3
320 INPUT a$
```

*This will print the length (in hex), the version and the name of all except the host module.*

**Adding a Module:** If you have a module (for example a keyboard table as set up in the May/June issue - the SBASIC program for setting up a language dependent module was not printed because I forgot to put it on the disk - you can pick it up from Jochen Merz's box or maybe from your local box) that you wish to incorporate. It is usually easiest to add it to the end. To do this you will need to take off the trailer and add the new module and add the trailer again. You may then need to update the length in the host module either as described above for the QXL or "properly"

```
100 REMark - add module to bootloader file
110 OPEN #0, CON: CLS: BORDER 1,4
120 height = 17
130 INPUT 'SMSQ file> ';f$
140 OPEN #3,f$
150 fln = FLEN(#3)
160 INPUT 'New module file> ';m$
170 OPEN_IN #4,m$
180 mln = FLEN(#4)
190 dim mod$(mln)
200 BGET #4,mod$(1 to mln): mod$(0) = mln
210 INPUT 'Module name> ';mn$
220 mnlen = len(mn$)
230 mnlen2 = mnlen + (mnlen && 1)           : REMark - round up module name len
240 mhead = $18 + 2 + mnlen2 + 4          : REMark - total module header length
250 :
260 LGET #3\fln-$18+$4, mod_ptr           : REMark - get length of host module
270 LGET #3\fln-$18+$10, fix_up, bln      : REMark - length of bootloader file
280 IF bln: bln = bln + mhead + mln
290 LPUT #3\fln-$18, mhead, mln, mln, 0, 0, $01000002 : REMark - $18 byte header
300 PUT #3,mn$: if mnlen&&1: BPUT #3,0     : REMark - name and pad
310 BPUT 'VERS'                           : REMark - 4 character version
320 BPUT #3,mod$                           : REMark - add module
330 LPUT #3, 0, mod_ptr, fix_up, 0, 0, bln : REMark - replace trailer
340 fln = fln + mhead + mln
350 :
360 IF fix_up
370 REPEAT
380 LGET #3\fix_up, addr, offset          : REMark - next fixup address / offset
390 IF addr = 0: EXIT
400 LPUT #4(addr+fix_up), fln+offset
410 fixup = fixup + 8
420 END REPEAT
430 ENDIF
```

*Editor's Note: The missing file mentioned above is LANG\_BAS and can be found in the SBASIC section of Jochen Merz's Mailbox (bulletin board) and is printed in this issue starting on page 45.*

# Causa Coneguda siá

Ivry Sur Seine, FRANCE - Claude Mourier

I read in Issue 1 of Volume 5 an interesting article by Tony Tebby about SMSQ Language Dependent modules; as a (happy now, because first versions...) QXL user I must admit that there is not a lot of documentation with this product (I agree with Nasta in Issue 3), so this type of article is very important (I think that some utility programs should have been shipped with the OS for beginners...).

Was the article cut (it seems a part was missing)? Were some of the commands Tony wrote of only available with SMSQ/E? Is there a short and complete Basic program that would be a good help for beginners (I am not able to change the current language on my QXL)?

But, this is not my main reason for writing, Tony Tebby used an example language (Occitan) in his article that a lot of readers may think was purely imaginery. This is not the case, I can confirm that there is in the south of France a (smaller and smaller alas) part of the population that speak Occitan. The oldest known text 'La Canson de Santa Fe' has been dated around 1040 - 1060. As a sample I have reproduced the title of this article in what can be found in public texts in the XII and XIII century ( it means something like: people must notice that...).

Occitan is the original language in an area from Bordeaux to Nice from west to east and from Limoges to the Pyrenees mountains from north to south ( with the exception of Euskadi and Catalonia). In addition there is a valley in Spain and twelve valleys in the north of Italy where Occitan is spoken.

The Occitan language is divided into five major dialects: Lemosin, Gascon, Lengadocian, Provençal and Auvenhat. If you are interested in additional information, you can write to the following address:

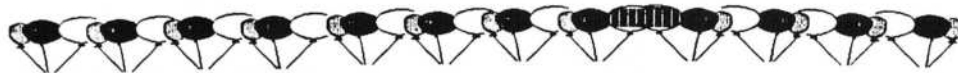
IEO Paris  
14, Rue Broussais  
75014 Paris  
France

You can also get information on Internet : [blanjf@ibm.net](mailto:blanjf@ibm.net)

*Editor's Note: Yes, a part of Tony's article was missing (please note our comments at the end of Tony's current article), SMSQ/E does indeed go beyond SMSQ as shipped with the QXL (why not order a copy of SMSQ/E from Jochen Merz Software or a supplier who carries it..), we have been running a series of articles titled "QXL in Command" with beginners in mind, we do hope they help.*

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### NEWS

\*\*\*\*\* NEW PROGRAM \*\*\*\*\*

**MINI GRAPHICS PRINTER** - This brand new program, by author Dilwyn Jones, is to aid in cataloguing large collections of clipart. Give the program a directory or disk of QL bitmap clipart and the program will produce a printout with many screens printed in miniature on a sheet of paper, optionally with filenames printed under the picture. The program supports Epson 9 and 24 pin, HP Deskjet and Canon BJ10 printers. Fully Pointer aware this program is a must for anyone with a large collection of QL bitmap clipart. The price is £15.

### TERMS/CONDITIONS

Software is supplied on 3.5 DD disks. For software available on microdrive see catalogue. All prices shown are in UK pounds Sterling. Software is sent post free in the UK, overseas add £1.00 per order. Please make payments payable to 'Quo Vadis Design'. Payment in UK pounds Sterling currency only. Cheques (drawn on a UK branch of a bank or building society), Postal Orders, International Postal Orders and Eurocheques are all accepted. Goods remain the property of Quo Vadis Design until full payment has been received. Call or write for a more comprehensive catalogue.

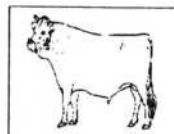


## PRESS RELEASE

### NEW PROGRAM - MINI GRAPHICS PRINTER

Mini Graphics Printer is a new program by Dilwyn Jones. The purpose of the program is to aid in the cataloguing of large collections of clipart. This is achieved by printing miniature views of clipart screens on to one sheet of paper with or without their filename. The screens below give an idea of the programs abilities. The program supports Epson 9/24 pin, HP Deskjet and Canon BJ10 printers. The program supports a wide variety of QL bitmap screens and is able to cope with extended screen sizes. The program is fully pointer aware and is a must for anyone with a large collection of QL bitmap clipart. Mini Graphics Printer costs £15 and is available only on disk.

CF4-2	CF4-2	MINI GRAPHICS PRINTER by Dilwyn Jones		INFO	ESC
DUMP TYPE	9-PIN	24-PIN	DESKJET	CANON BJ	
DUMP TO	SER1				
INVERT	NORMAL	INVERT			
LEFT MARGIN	0"	0.5"	1"		
PRINT WIDTH	6"	7"	8"		
PRINT HEIGHT	6-10"	7-10.7"	8-11"	9-11.7"	
PAUSE LINES	z-NONE	h-LINE	PAGE		
FORMFEED	NO	YES			
PRINT NAMES	NO	YES			
SCREEN TYPE	QL	EGA	VGA		
	SUGA	EXT.4	M.PIECE		
LOAD FROM	FLP1				
GRAPHICS BOX	3-NO	4-YES			
EXTENSION(S)	5-NONE	7-SCR	* COM & PIC		
PRINT PASSES	1-PASS	2-PASS	3-PASS		



SCREEN1\_SCR



SCREEN2\_SCR



SCREEN3\_SCR



SCREEN4\_SCR



SCREEN5\_SCR



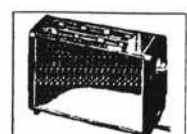
SCREEN6\_SCR



SCREEN7\_SCR

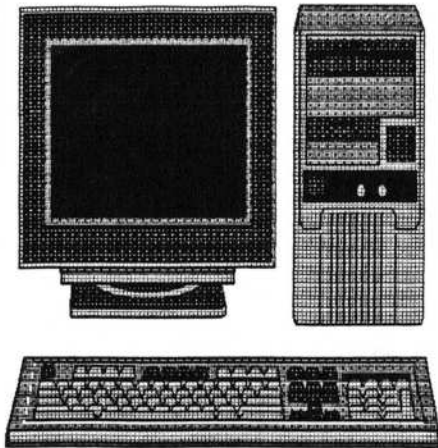


SCREEN8\_SCR



SCREEN9\_SCR

This is an example of the print layout (not an actual printout) from the Mini Graphics Printer



### Q.L. Mini Tower Kit

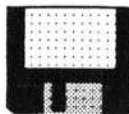
The QL Mini Tower Kit comprises of the following components:-

- 1 - PC Mini Tower Case complete with 200 watt P.S.U.
- 1 - QPlane powered back plane.
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- 1 - 8 pin DIN chassis socket (Monitor connection).
- 1 - 5 pin DIN chassis socket (Keyboard connection).
- 2 - 3.5mm jack sockets (QL Local Area Network connection).
- 1 - Di-Ren Keyboard I/Face + PC Keyboard.

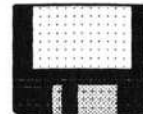
All the above fully fitted into the PC Mini Tower Case.

**£180.00p (JM Version) £190.00p (JS Version)**

£20 PX for JM QL £30 PX for JS QL £32 PX Keyboard I/Face £18 PX Keyboard



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# QD - Version 8.03

Portslade, Sussex, ENGLAND - Q of Q Branch



## QD and its Many Applications

The text editing program, QD, has been undergoing constant revision by Jochen Merz over the last few years and has now arrived at version 8.03. Whilst this is certainly not the final version of the program we feel that the time has come to say a few words about how users can get the full advantage of its many features and of the excellent Public Domain programs by Wolfgang Lernerz and Thierry Godefroy that are available to use with it.

**QD Itself:** There are a large number of text editors available for the QL and some, such as the Editor, are crammed full of features and functions that would take a lifetime to both explain and learn. Many of you will already be familiar with QED the Public Domain text editor that for many years served as the front end for S.J.P.D's catalogue and has only just been superceeded by Dilwyn Jones' new text viewer which can include QL\_pic files. (If you have not yet seen this I suggest that you contact either Qubbesoft or S.J.P.D. both of whom are now featuring it as a catalogue medium. Q Branch may soon follow suit)

QD cannot do everything and there are many people who would not abandon the Editor, for instance, to move to a new text editor but QD has the advantage that the screen size is completely user configurable and so can take advantage of the larger screens of the Atari and QXL-driven computers as well as the new graphics card when it finally arrives. The program is pointer driven but a mouse is not necessary for its use although it does make functions like 'block mark;', 'copy' and delete much quicker and easier, to use. The current version of QD has an icon bar across the top of the editing window that allow the user to quickly instigate several of its major features. 'Hit' the first disk icon and you are presented with the Qmenu file select menu to load a file. A 'Do' on the same icon will allow you to insert a file into the one that is currently displayed and the cursor changes to a 'double arrow' sprite that can then be moved to the place that you want to insert the text. 'Hit' the second icon and the file that you are currently working on is saved. If you want to save the file with a new file name all you have to do is to 'Do' the same icon and you are presented with a window to edit the file name. The same easy actions are available for the block functions including delete and send to scrap.

A screenshot of the QD text editor interface. The window title is "WIN1\_MYPROGS\_Calcchoice\_bas". The menu bar includes "File", "Command", "Block", "Status", "Word", and "QD2FI". Below the menu bar is an icon bar with various symbols for file operations. The main text area contains the following code:

```
110 OUTLN#0,512,256,0,0
120 WINDOW#0,512,52,0,204:BORDER#0,1,4:PAPER#0,0:INK#0,7:CLS#0
150 DIM vers$(3,12)
160 vers$(0)='Calculator'
180 vers$(1)='Calendar'
190 vers$(2)='Converter'
195 vers$(3)='Hexcalc'
200 T%=LIST_SELECT ('Calc v1.01',vers$,,16,2,4,2,,3,1)
```

### QD8: The Main Program

The other main points about QD that make it stand out from other editors are its versatility, Hyper Help and the ability to use the 'Thing' system to make it the perfect programmers tool. This versatility is further enhanced by the way in which different setups can be called from the same resident code and that is something that I hope to explain here.

**Help:** QD comes supplied with two help systems. QD\_help is the normal form of help which explains the use of the various functions and commands and is one continuous file that is called up by pressing F1 in the normal

## QD Version 8.03 - (cont'd)

manner. The really clever part is Hyper Help. This is supplied on a separate disk which contains a series of text files which cover a large number of SuperBasic commands. The text files explain the actions, syntax and usage of these commands and often give examples of their use. If you are writing a SuperBasic program and want more information on the command that you are using then all you have to do is to place the cursor on the command and press F1. A new QD window appears containing the information and will disappear when you press ESCape leaving the cursor exactly where you left it. the current Hyper Help disk contains most of the SuperBasic command and purchasers of the QMenu package (v6.20 + ) receive an additional series of files to add on which describe the extra commands that Menu\_rext installs. I have been working on some DATAdesign programs recently and, to make the work easier I have typed those commands into Hyper Help myself. ( I am passing these on so they may well appear on later disks)

You are, of course, only able to load one help system in any one setup but there is even a way of making QD recognise the type of file that you have loaded into it and making it load the appropriate help file ( see the section on P.D. programs)

**Loading Different Setups:** The best way to load QD into your system is to use the following line:

```
LRESPR {dev}_QD
```

followed, at a suitable point by:

```
BT_WAKE 'QD'
```

which will give you a button to allow you to wake QD whenever you need it.

There is a standard level 2 config block to allow you to set up the way in which QD works, tab stops, which help file, where the help file is and many other functions but all of these things can also be set from the command line when calling QD or in the boot file. My boot file has the above lines in it but I have configured QD to use the QD2FI P.D. program from Wolfgang Lerez that is described below. There are three other QD oriented lines in my boot file and these are used to call up specialised QDs.

ERT HOT\_THING ('S','QD';\-e \_bas\t SBAS/QD\h WIN1\_basic\_help') will call up QD when I press ALT/S and give me a version of QD that has the following attributes:

\e \_bas :means that any files presented in the File Select menu for loading will have the extension \_bas - thus saving a lot of time when looking for the file that you need by eliminating all but basic files.

\t SBAS/QD : will load the SBAS/QD thing and place its name in the F10 option (seeThe F10 option)

\h WIN1\_basic help : tells QD that the help files are located in a subdirectory called 'WIN1\_basic\_help'

It is really that simple.

One last reason for loading QD in this way is the 'FileInfo Thing'. This is written by Wolfgang Lerez and provides a link between the files menus of QPAC 2, CUESHELL, and later versions of Disk Mate 5. If you answer 'yes' to the prompt 'install the FileInfo Thing' in QD's config block then you are provided with the means to load any non-executable file directly from these programs into QD. All you have to do if the above criteria are met is to go to the files menu and 'Hit' the file of your choice. If this is not an executable file (or a \_bas file if you are using SMSQ/E) then the FileInfo thing takes over (QPAC 2 will first ask if you want to execute this file - answer yes) picks QD and loads the file into it ready for viewing or editing. Thierry Godefroy has taken the FileInfo thing a stage further but more of this later.

**THE F10 OPTION:** QD's screen has a box at the top of it that contains all the keypresses that are needed to pull down it's command menus. One of these only contains the label 'F10' until you pout a 'Thing' name into it but, when this is done it becomes one of the most powerful keypresses in the program. One the master disk you will find a file called 'QDasm'. This is the link between QD and the Quanta/Qmac assembler ( This file has been temporarily removed from QD v 8.00 on because a bug was found in the code. It will re-appear when the bug has been corrected). If you write your assembler program in QD and, after first saving the \_asm file, press F10 the

## QD Version 8.03 - (cont'd)

QDasm thing invokes the assembler, compiles the program, saves it (if there are no errors) and runs it. If an error is found then it is reported and you are returned to QD to edit the text. To do this you have to first LRESPR the QDasm\_rext file and use the line:

```
TH_LOAD {dev}_QMAC,QMAC
```

There is another program available called QBASIC. This also needs to be loaded with a LRESPR {dev}\_QBASIC\_rext command and then it will appear in the F10 slot in the same way as QDASM does. This will not only parse the code for errors, either in syntax or spelling, but will also then pass control over to QLiberator for compilation. To achieve this you must first load all of the QLiberator extensions with a line similar to this:

```
LRESPR QLIB_RUN: LRESPR QLIB_BIN : LRESPR QLIB_EXT
```

and load the QBASIC thing with

```
LRESPR QBASIC_rext.
```

YOU must also use the line:

```
TH_LOAD {dev}_QLIB_obj,QLIB
```

and tell QBASIC where to find the QLIB\_obj file, what to call it and what QLiberator options to pass.

Once all this is done ( and most of it can be done in a boot file so you need only ever write it out once) Your configuration is complete and QD will appear with the word 'QBASIC' in it's F10 slot. Once you have written or loaded the code that you want to compile you have only to press F10 and the code will be passed through QBASIC's parser and checked for spelling or syntax errors. If the program passes through this successfully then control is passed over to QLiberator for compilation and the familiar window will appear on the screen. If the code compiles without errors it is run for testing and, on completion you are returned to QD. The compiled code is saved, along with its error file, in the same directory and under the same name as the \_bas file (only now it has the extension \_obj). If there are any errors in the Basic code then they are reported in a QMenu error box and the cursor is placed on the offending line. Errors such as missing END IF statements are not trapped in this way because QLiberator can deal with them although they are reported in the QLIB\_err file.

The same process can be done with SBASIC if you use SMSQ/E because SMSQ/E has it's own QD Thing called SBAS/QD built into the code. It is, in fact, even simpler to use this than the other things because it is automatically loaded when SMSQ/E is started and all you need to do is to tell QD to use it either in the config block or in a line of Basic as shown above.

The above three setups are in constant use on my QL (although I know very little about machine code and am still trying to get to grips with the basic ideas)

All of the above can be found in the QD manual and I have included it here to give you a general overview of the program's capabilities but it does not stop here. Wolfgang Lenerz, Thierry Godefroy and Jonathan Hudson have taken this a stage further in their Public Domain programs and it is these that I will now describe to you.

**QD and the Public Domain:** After Wolfgang Lenerz released the 'FileInfo Thing' for QD Thierry Godefroy took it a stage further and made it a general utility for QDOS/ SMS users. FileInfo 2 is now at version 2.4 and although it only relates to QD peripherally I will digress for a moment and briefly describe it's use.

The original 'FileInfo Thing' described above will load any file into QD if executed from the files menu. this happens so long as the file is not an executable one and means that \_rext files or any machine or tokenised code will be loaded so long as it does not have an executable header. In FileInfo 2 you have a list of extensions (\_bas, \_doc etc) and you can tell FileInfo which program to start and what action to take when the program is started. For example, if you have have Text87 on your hard disk in a subdirectory called \_progs and you have configured the extension \_T91 in the FileInfo 2 list to read :

```
<pause>9L<devN_name_ext><ENTER><ESC>
```

and the executable file to read :

```
WIN1_PROGS_Text87plus4
```

## QD Version 8.03 - (cont'd)

the FileInfo 2 will start Text87 and load in the file ready for viewing or editing. This same process can be done for any kind of program and can even be extended for \_zip files. You can add your own extensions and configure the whole thing to suit your system. This configuration process is by means of a separate program called Fi2config\_obj and although it is very comprehensive it does take a bit of getting used to. FileInfo 2 also has a \_pic file viewer which will allow direct viewing of any QL screen dumps in the \_pic format. Any extension not recognised by FileInfo 2 or file with no extension is automatically loaded into QD.

```
ESC ..... SELECT ..... OK
0 Name of extension? => cnp
1 Help file/dir for files with this extension? => dev1_help_qd_basic_
2 Name of extension? => asm
3 Help file/dir for files with this extension? => dev1_help_qd_asm_
4 Name of extension? => bas
5 Help file/dir for files with this extension? => WIN1_BASIC_HELP_
6 Name of extension? =>
7 Help file/dir for files with this extension? => WIN1_PROGS_QD_HELP
8 Name of extension? => pfd
9 Help file/dir for files with this extension? => WIN1_HELP_pfhelp
```

### QD2FI2 Config Block

how it works : first you have to configure QD2FI with the standard QJump configuration routine (or menuconfig which is part of the QD package and so much easier). You are presented with a list which will allow you to configure 5 different extensions with the help file that goes with it. (eg \_bas files loaded into QD call up the files in the subdirectory WIN1\_BASIC\_HELP\_) Since I have given the name of a subdirectory (by adding the final underscore) the Hyperhelp system takes over and performs the task described above in the section on help. Had I given the name of a file without the final underscore then the file of that name is loaded into another QD and presented on the screen. (I have typed in a list of the syntax requirements for the PROGS program pfDATA and saved that as WIN1\_HELP\_pfHELP and linked that to the extension \_pfd that I use for pfDATA instructions and that whole file appears when I need it). Unfortunately, as I mentioned above, the only help files available commercially are those for Superbasic in Jochen Merz's Hyperhelp system and the add on files for Qmenu available on the Qmenu disk v6.20 up but it is a simple, if time consuming, job to make your own and, once you have made them, you will be surprised how much easier it makes programming .

Secondly you can get QD2FI\_bin to call up a compiler or assembler and pass the code you have written directly to it for compilation or assembly. This is where the FileInfo 2 link comes in. You have to link the extension of the file type to the appropriate compiler in the FileInfo 2\_config\_obj program. This is a fairly simple process (although my comments about FileInfo 2's configuration process still stand) and can be as simple as this. Say, for instance, you are writing an assembler program and need to call the Quanta/QMACS assembler. If you have loaded the QMAC code as a thing with:

```
TH_LOAD {dev}_QMAC
```

you need only go to the FileInfo 2 config program and link the extension \_asm to the compiler by placing the name QMAC into the box marked 'Name of associated Thing and/or job' and that is it. You can, of course, make things .more complicated adding a command string to be passed to the assembler when it is loaded and that can be done in the box marker 'Associated command string'. This has one drawback and that is that it makes that extension inaccessible for other uses in FileInfo 2. The degree to which this is a disadvantage depends on the way in which you use FileInfo 2. If, like me, you prefer to use FileInfo 2 to load a program into QD for editing then you are better of setting the extensions in the way described earlier. Since you get the QDasm Thing that links with QMAC with QD and the SBAS/QD Thing with SMSQ/E it is only the QBASIC file that is needed to link it to QLiberator and that only costs around £25.00.

For example: to load an assembler file into a copy of QD configured to use the QDASM Thing configure FileInfo 2 thus: On the line marked "Name of associated thing or Job" enter:

```
'QD'
```

On the line in FileInfo that says 'Associated command line' enter:

```
'EXEP QD;"<dev_name_ext>\T QDASM"<ENTER>
```

## QD Version 8.03 - (cont'd)

This will pick QD, set the F10 thing to QDASM and load in the file that you have chosen.

This does have a slight circular effect if you have loaded an assembler file in a copy of QD that is configured to have QD2FI as its F10 Thing then pressing F10 will call FileInfo 2 to which will, in turn, load another copy of QD with QDASM as its F10 Thing. Not a disaster but a bit confusing.

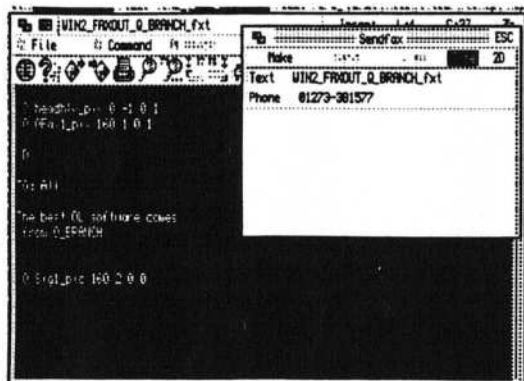
**QFAX and QD:** The same process can be repeated to use QD as a front end for Jonathan Hudson's QFAX program and Phil Borman's Sendfax. If you use the QD2FI2 thing in QD and you use the extension `_fxt`, say, for the text that you are writing in QD that will eventually become your fax you need to configure FileInfo 2 to pass this text to Sendfax. You do this by configuring FileInfo 2 thus:

In the box marked '1st executable file name' you need

```
{dev}_SENDFAX
```

and ignore the 'Associated command line' option

When you click on QD2FI and you have not saved the file you are prompted for a file name to save it under. Once you have given it a name and saved the file QD2FI will then go to FileInfo 2 to see what to do with a file whose extension is `_fxt`. If you have configured it as suggested above it will call up Sendfax and you then click on 'Text' and the file you have just created will be at the top of the list. From then on all you need to do is follow the instructions in both QFAX and SENDFAX (and there are far too many of them for me to negotiate here) and the fax will go.



SENDFAX As Seen From QD

So there you are. QD is that rare thing - a truly multipurpose, versatile program. I have no doubt that many people who have it already have found many other uses for its facilities that I have not even noticed. I have not even mentioned its use as a means of quickly sending blocks of text into scrap and retrieving them in LINEdesign.

The public domain programs that link into QD can be found in the libraries of Qubbesoft, 38 Brunwin Road, Rayne, Braintree, Essex CM7 5BU or S.J.P.D., 36 Eldwick Street, Burnley, Lancashire, BB10 3 DZ or in the Quanta Libraries. Those of you with access to modems can track them down on the boards that are run by Phil Borman, T.F. Services or Jochen Merz so get out there and try it all out. QD can be bought either from us at Q Branch or from Jochen Merz. I have tried not to make this too blatant a piece of advertising. If anyone has any other good uses or interesting pieces of software that will link in to QD please let us know (a C compiler maybe there used to be one).

## The Best of IQLR

With the next issue we will have completed our fifth year of publication. A number of QLER's have suggested that we might consider publishing "The Best of IQLR". The thought is further enhanced by the fact that many of our readers have only recently (the last two and a half years) become subscribers. Another is the lack of back issues and yet another is the desire to have all those multi-part series altogether.

The idea does sound intriguing, but, to do it right, we need your help. What do we include?? What do we leave out?? Should we include current advertising?? How big should it be (somewhere between 150 to 200 pages and properly bound I would think)?? Should we do it at all?? It is in your hands, let's hear from you.

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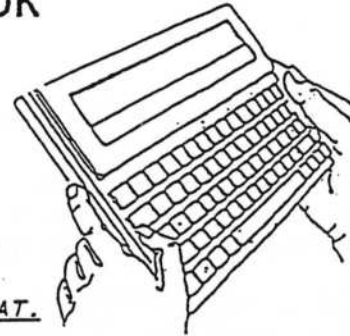
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# Alternative to True Multitasking

London, ENGLAND - Peter C Tomlin

In the March 1995 issue of QREVIEW there appeared an article titled "BEYOND QUILL" that expressed the sentiment regarding whole disks full of Spellcheckers, whose only service to the user was to indicate how many spelling mistakes were printed in the document just produced is a logical one. In order to correct those mistakes, what has the user to do?? - why, go to the bookshelf and take off the Dictionary, which he/she could have done in the first place!!

However, there is a very good Spellchecker for the QL, which DOES provide for the user the word correctly spelled-out on screen and a list of alternative words, when called upon, after insertion of the first few letters of a suspect word. This Spellchecker is titled "SPELLBOUND" and is available from QUO VADIS DESIGN. You can also add your own words permanently to the list. I have owned SPELLBOUND for a few years, for I am a bad speller and would NEVER be without it now.

**MULTITASKING:** Although the Psion quartet will not multitask with QL Wordprocessors and Spellcheckers as such, there is an alternative way to switch between them almost instantaneously, and that is to tuck the programs snugly into RAM with a SuperBasic program, from where they can be called at the touch of a couple of keys. (See the accompanying lists.) Whilst the Psion programs remain there dormant, the Wordprocessor and Spellchecker will be actively resident, while the QL remains on. Switching between programs and Wordprocessor is done by entering CONTROL/C followed by the two letters to access the required program.

YOU MUST QUIT FROM EACH PSION PROGRAM IN ORDER TO LEAVE IT, BEFORE PRESSING CTRL/C TO CHANGE PROGRAMS, OR THE QL WILL LOCK YOU OUT.

In order to group these programs together, you must have extra memory. I use a JM QL with a Gold Card, but just as a test I reduced my QL memory to RES\_SIZE 14\*64 (as described in the Gold Card's manual) to act as though it was connected to a Trump Card and there seems to be no problem here.

To use Spellbound, the Spellboot which comes with the program must be modified, instructions for doing so are contained in its small manual. There are just two lines you need to add on to the end:

```
220 EXEC flp1_EDT_BIN (or EXEC flp1_PERFECTION)
230 LRUN flp1_getprgs
```

Spellbound must be loaded in the order set out in the Boot list with which this article is concerned. One assumes that if Spellbound is present, it is on the Wordprocessor disk.

Without Spellbound lines 350 to 420 should be omitted from the Boot list and in their place type in:

```
350 EXEC flp1_EDT_BIN (or Perfection): LRUN flp1_getprgs
```

**The PROCESS:** Ram1\_ and Ram2\_ are created. The Psion programs are COPIED into Ram1\_. Ram2\_ is available to save files while switching between programs. The Wordprocessor becomes resident (as well as the Spellchecker, if present). You exit the Wordprocessor with CTRL/C.

The Psion programs are called by tapping two keys from a PROCedure in "getprgs". You regain access to the Wordprocessor by QUITting out of the Psion programs. A procedure "jog" in the "getprgs" list will call a small menu to screen #0, which acts as a reminder of how to change programs.

There are two warnings of which the first is all in CAPITAL LETTERS above and the 2nd:

IF USING PERFECTION, THE VERY FIRST KEY STROKE AFTER THE PROGRAMS HAVE LOADED MUST BE CTRL/C TO GET OUT OF SUPERBASIC INTO PERFECTION OR PERFECTION WILL LOCK OUT THE OTHER PROGRAMS. THEREAFTER THERE IS NO PROBLEM IN SWITCHING.





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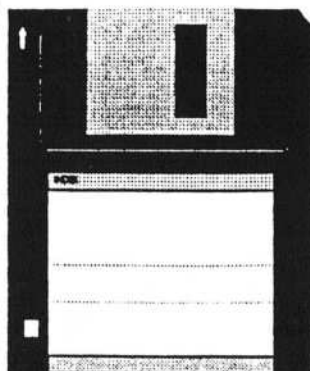
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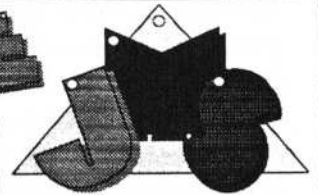
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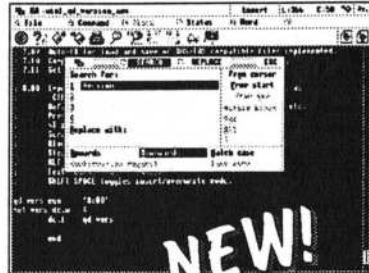
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## QD Version 8

As you might catch from the picture, QD looks a bit different: many common menu options are now quickly available via icons! But there is more: blocks can be shifted left or right, even with defined fill character (easy to add "\*" or "\*" comments now). Search and Replace are now one integrated menu, therefore easier to handle (see in the picture). QD now flags if the current text has been modified. Steady cursor is back! More useful keystrokes added and, users without a mouse can now get to the icon bar with a keystroke. This and much more is available in the current version of QD, the flexible and versatile Editor for the Pointer Environment. Price is still the same: **DM 125,-**. For update prices refer to the "update" box of this ad. (V8.05)



**NEW!**

## LDUMP

Now you now scale screen dumps exactly and to any size you like. You can position it perfectly on the paper. The exact ration remains intact. Any resolution of your printer is supported. LDUMP works on all dot-matrix printers, and there are also modes for Inkjet and Laserprinters. The printout can be true or inverted, colour-extracts of up to eight colours and colour-printing is possible! You can dump the contents of the screen or windows, contents of a file or a save area. LDUMP can be invoked using HOTKEY or BASIC-commands. **DM 65,-** **NEW!**

## I/O2 BASIC Extension

Over 350 new instructions, with 700k Assembler source text (for GST/Quanta QMAC Assembler). The collection consists of 8 different blocks with a base block, so that you can create the toolkit you need. I/O2 provides commands for various purposes, lots of which you haven't found anywhere else yet: search I/O data and channels, use and redefine them. Calculation. Job-communication. String-Handling. TRA-tables. 4 additional character sets, data transport, MEM and STAK device. Job and System with their data, load/save. Standard-, turtle- and 3D-graphics. Windows, Timer, sound-generator. Programmable error handling. It is useful to have a basic knowledge of the QDOS/SMSQ system. **DM 99,-**

**NEW!**

## QL Hardware & Spares

**QUBIDE** Harddisk interface **DM 219,-** **QPLANE - QL Backplane** **DM 89,-**  
**FLP/RAM** Level 2 device drivers for SuperQBoard or TrumpCard **DM 68,-**  
**SER Mouse software driver** **DM 40,-**  
**SER Mouse Package (mouse, adaptor & driver)** **DM 87,-**  
**ZX8301** **DM 24,90** **ZX8302** **DM 19,90**  
**QL Keyboard membrane** **DM 25,-** **2 membranes** **DM 45,-**  
**SUPER-HERMES is available from Jochen Merz Software now!!!**

## QL-Emulators for ATARI

**QVME:** High-Res QL-Emulator for Mega STE and TT (up to 1024x800 pixels and more). **DM 499,-**  
**EXTENDED4:** QL-Emulator for 260ST, 520ST/ST/STFM, 1040ST, Mega ST (not STE!!!) **DM 289,-**  
**If you are interested in a QL-Emulator for any ATARI ST/STE/TT computer and you still have doubts then please call me and we discuss it. Everyone who saw my TT in action will confirm that this machine is giving the best "QL", in many respects.**

# SMSQ/E V2.70

**SMSQ/E** updates are free, just send master disk(s) & return postage or use the free mailbox update service! Albin Hessler gave his kind permission to bundle SER Mouse with every **SMSQ/E** for the GoldCard and SuperGoldCard. This applies to free updates too. The manual is now Revision 3 - including the SER Mouse documentation and all the changes so far. A new manual costs **DM 16,-**.

Feature	ATARI ST(E)/TT	(Super)GoldCard	QXL
New Operating System	<b>NEW</b> DM 199,-	<b>NEW</b>	already ex.
Multiple, fast BASICs	<b>NEW</b> (if you own the QJUMP-drivers)	<b>NEW</b>	already ex.
Flexible Level 3 Drivers	<b>NEW</b> Level C, D or E	<b>NEW</b> DM 199,-	already ex. DM 199,-
HD Disk-drive support (STE/TT)	<b>NEW</b> (already) else	already ex.	already ex.
TT Fast RAM support	<b>NEW</b> DM 249,-	impossible	impossible
Monochrome Screen-driver	<b>NEW</b> + DM 50,-	impossible	impossible
New Screen-driver	<b>NEW</b> + DM 50,-	<b>NEW</b> + DM 50,-	<b>NEW</b> + DM 50,-
"background" Disk/Harddisk	<b>NEW</b> + DM 50,-	impossible	<b>NEW</b> + DM 50,-
BASIC-Development-Environment	<b>NEW</b> + DM 50,-	<b>NEW</b> + DM 50,-	<b>NEW</b> + DM 50,-
Total price (when all is available)	with rebate, <b>DM 349,-</b>	<b>DM 299,-</b>	<b>DM 349,-</b>

As a special bonus (we know that many users own more than one system), we offer the version of an additional system 33% more. This also applies to the upgrades, e.g. DM 66.66 instead of DM 50,-, which we think is very fair (it just covers extra disks and manuals).

Applications	Price Cut!	[V3.00]	DM 44,90
<b>QBASIC</b>			<b>DM 84,90</b>
<b>QDOS/SMS Reference Manual</b>			<b>DM 35,00</b>
<b>4 * Update sheets for Ref.Manual (incl. p&amp;p)</b>			<b>DM 49,90</b>
<b>FFI</b>	New Version!	[V3.08]	<b>DM 92,-</b>
<b>QPTR</b>	New Version!	[V0.26]	<b>DM 79,90</b>
<b>QSUP</b>		[V3.06]	<b>DM 69,90</b>
<b>QLQ</b>		[V1.13]	<b>DM 61,50</b>
<b>EPROM Manager</b>		[V3.01]	<b>DM 49,-</b>
<b>EasyPTR Part 1</b>		<b>DM 89,-</b>	<b>Part 2 DM 49,-</b>
<b>LineDesign</b>	Price Cut!	[V2.07]	<b>DM 239,-</b>
<b>FontPack for LineDesign (100 Fonts)</b>			<b>DM 195,-</b>
<b>HyperHelp for SuperBASIC</b>	Price Cut!	[V2.01]	<b>DM 44,90</b>
<b>DISA</b>		[V2]	<b>DM 95,-</b>
<b>QMAKE</b>	New Version!	[V4.03]	<b>DM 44,90</b>
<b>QMENU</b>		[V6.20]	<b>DM 39,90</b>
<b>typeset 93-ESC/P2 (Stylus driver for text87)</b>			<b>DM 69,90</b>
<b>QLiberator</b>		[V3.36]	<b>DM 139,-</b>
<b>WINED</b>	New Version!	[V1.15]	<b>DM 49,90</b>
<b>DiskMate</b>		[V5]	<b>DM 69,-</b>
<b>QSPREAD</b>		[V1.29]	<b>DM 169,-</b>
<b>QMON/JMON</b>		[V2.13]	<b>DM 94,90</b>
<b>CueShell</b>		[V2]	<b>DM 95,-</b>
<b>DataDesign</b>		[V3]	<b>DM 149,-</b>

## Upgrades

<b>HyperHelp Upgrade from V1</b>	<b>DM 6,-</b>
<b>FIFI Upgrade from V2</b>	<b>DM 6,-</b>
<b>FIFI Upgrade from V1</b>	<b>DM 16,-</b>
<b>QMAKE Upgrade from prev. Versions</b>	<b>DM 16,-</b>
<b>QBASIC Upgrade from V1</b>	<b>DM 6,-</b>
<b>QMenu Upgrade from any Version</b>	<b>DM 16,-</b>
<b>QSUP Upgrade from any Version</b>	<b>DM 16,-</b>
<b>EPROM Manager Upgrade from any Vers.</b>	<b>DM 16,-</b>
<b>QD Upgrade from V7</b>	<b>DM 24,90</b>
<b>QD Upgrade from previous Versions</b>	<b>DM 39,90</b>
<b>LineDesign Upgr. from V1</b>	<b>DM 129,-</b>
<b>DISA V2 Upgrade from V1</b>	<b>DM 35,-</b>
<b>QMON/JMON Upgrade from V2.xx</b>	<b>DM 16,-</b>
<b>QMON/JMON Upgrade from QMON only</b>	<b>DM 32,90</b>
<b>QSpread Update</b>	<b>DM 16,-</b>

## Games

<b>Diamonds</b>	(Action)	<b>DM 39,90</b>
<b>BrainSmasher</b>	(Strategy)	<b>DM 39,90</b>
<b>Arcanoid</b>	(Action)	<b>DM 39,90</b>
<b>Firebirds</b>	(Fast Action)	<b>DM 35,90</b>
<b>SuperGamesPack</b>	(5 various games)	<b>DM 90,-</b>
<b>QShang</b>	(Strategy)	<b>DM 39,90</b>
<b>The Oracle</b>	(Strategy)	<b>DM 39,90</b>
<b>BlackKnight</b>	(Chess)	<b>DM 119,90</b>
<b>DoubleBlock</b>	(Tetris)	<b>DM 39,90</b>
<b>Lonely Joker V2</b>	(6 Card games)	<b>DM 59,-</b>
<b>Lonely Joker V2 Upgrade from V1</b>		<b>DM 29,-</b>
<b>Pipes</b>	(Action & Strategy)	<b>DM 29,-</b>

**If you require more information about any product, then please write for a free catalogue!**

## TERMS OF PAYMENT

Postage and package (Europe) **DM 14,-** (if total value of goods is up to **DM 50,-**, then only **DM 9,-**). (Overseas) between **DM 14,-** (1 item) and **DM 35,-** (maximum). All prices incl. 15% V.A.T. (can be deducted for orders from non-EEC-countries). E&OE. Cheques in DM, £'s, Eurocheques and Credit Cards accepted.

## UPDATES

Updates of our software are usually free. The exception: major changes on a program (a new Version number before the '.'). Always send the master disk(s) to us, together with 4 international reply coupons for up to 5 discs or 8 IRC's for more. If you send updates together with a software order, then the return postage is covered by the wholesale postage. If a disk is faulty, add 1 IRC for a replacement. As the software changes from time to time, you may order a new manual together with the disc update. With upgrades, you automatically get a new manual.



## **WHAT WILL THE QL COLLECTION COST ME?**

Just **£179 in total**. There is nothing to add, no hidden taxes, and P&P to anywhere on earth is included (add £5 for Airmail). You save over £2,100. DP recognises that you probably have some titles already (though perhaps not the latest releases), and some may not be of interest to you yet (likely to change when you see them!) - the price reflects this! **THE QL COLLECTION** is worth it even if you only want to update all your existing DP products: however, DP will continue to accept orders for *individual* DP programs at the prices quoted if you really insist.

## **WHAT EXACTLY IS INCLUDED IN THE QL COLLECTION?**

You get the fullest, very latest, most up-to-date releases of all - **every single one** - of the 66 QL programs listed. The software is the finest, and the QL's very best. The titles would cost you over £2,300 (plus applicable P&P) to buy individually - you can check this by summing the prices overleaf, or those quoted in earlier ads. The only titles omitted are Mega Dictionary (only for 2Mb RAM systems - add £15 for it), MS-DOS v6.22 upgrade (add £90) and any less capable variant of a title that is itself included in **THE QL COLLECTION** (e.g., since the top-of-the-range PROFESSIONAL PUBLISHER is included, DESKTOP PUBLISHER is obviously excluded). You get both versions of PC CONQUEROR (as the list shows) so as to cater for all hardware variations. You may never ever need to buy another QL program again. The range of software you will get is truly staggering. It is too good to be true. But it is true - while the offer lasts....

## **WHAT ABOUT THE PROGRAM DOCUMENTATION?**

All the latest applicable documentation (lots and lots of it) is included on disk, and can be read and printed using Perfection Special Edition or Editor Special Edition, which are also both included, and which can - of course - be used to search, browse, analyse or "edit" manuals at your leisure. Printed copies may be bought later if wanted - full details are sent with the order.

## **WHY CAN'T I FIND THE CATCH IN ALL OF THIS?**

Because there isn't any. DP, whose QL commitment continues, makes this super offer to celebrate the birth of a marvellous baby daughter Michelle, now through all her early problems, to Julie and Freddy. **THE QL COLLECTION** is licensed for use by the purchaser alone, who by buying it agrees not to resell or otherwise pass on any part of it, or of any DP software already possessed. Technical support is negotiable: full details are supplied with the order for you to take up should you want to do so. DP reserves the right to withdraw **THE QL COLLECTION** offer at any time later than 14 days after your receiving this magazine, so please do hurry.

## **WHAT HARDWARE WILL I NEED TO RUN THINGS?**

You will need a twin disk drive (DD, HD or ED, 3.5" or 5.25"), lots (123?) of blank disks and over 1.5Mb RAM (Gold Card, Super Gold Card, QXL, ST/QL and equivalents) to fully use **all** the software. The vast majority of titles will, however, work on much smaller systems: earlier DP ads indicate with precision the minimum hardware needed to run each program. If no disk size is specified when ordering, DP will assume 3.5" DD. If you do not yet have a powerful enough QL system, you may wish to contact a hardware dealer and buy, say, a second-hand Gold Card and/or twin disk drive (preferably 3.5" DD or HD - avoid Mitsubishi, and if HD or ED, ensure 100% compatibility with all Gold Cards is *fully guaranteed* by the supplier) as needed.

## **HOW CAN I GET MY COPY OF THE QL COLLECTION?**

**THE QL COLLECTION** can only be obtained directly, by posting your order (including payment of £179 by cheque drawn on a UK bank / building society, Eurocheque or postal order; or quoting a VISA or MASTERCARD credit card no: and card expiry date) as soon as possible to:

**DIGITAL PRECISION LTD, 222 THE AVENUE, LONDON E4 9SE**

# **THE QL COLLECTION**

# *The QL and the Internet*

*Huber Heights, Ohio, USA - Tim Swenson*

Over the last couple of years, the Internet has become the hot topic in computers, with the World Wide Web almost being considered THE Internet killer application. The dominant view of how one gets access to the Internet is to use "Internet-in-a-box" type software and an Internet Provider to make your computer look like it's on the Internet. For the less computer savvy, hooking up through a service provider like CompuServe, America On-Line, or Prodigy is the way to go.

All of these methods of getting access to the Internet require some special software for your computer. For those of us in the QL world, that leaves us out. At least as far as the above solutions go. The Internet has been around for at least 15 years, the Web has only been around for about 3 years. There are many ways to get access to the Internet that don't require much software on your end.

**Internet Services** - The Internet has a number of ways of getting information:

**World Wide Web:** Also known as the Web or as WWW. Web browser software on your computer makes requests for data from Web Servers. Most data is in the form of documents, graphics, video, sound, etc. The interface is mouse driven and has "hot links" which when clicked on brings up another Web document.

**Gopher:** Kind of like the Web but uses a menu interface similar to that used by a BBS. The original Gopher interface was character based, but graphical ones came out later. Gopher has almost been taken over by the Web.

**Telnet:** Allows you to connect or login to another system and start using it. Connecting to a BBS is kind of like Telnet-ing.

**FTP - File Transfer Protocol:** Allows you to transfer files to and from computers. It only allows commands like GET and PUT. Does not allow you to run an application on another computer (like Telnet does).

**Finger:** Finger is a protocol/application that queries another computer for information about a person on that computer. Some people have useful information that is returned via the finger command.

**Mail:** Electronic mail is one of the primary reasons for getting on the Internet. Letters can take minutes instead of days to get where they are going.

**USENET:** USENET is kind of like the Internet News Service. It's a loose collection of computers sharing messages that their users write. USENET sends articles or "postings" around the world.

**How to do this on a QL:** With a little effort you can use your QL to access all of these services. The key thing that allows this for the QL (or almost any computer) is a VT100 communications program. VT100 is the standard interface for computers and terminals accessing the Internet. Everyone supports VT100. For the QL, there are a number of communication programs that support VT100, with the two primary being QEM and QTPI.

To make all of this work, you will need to get a Unix account on a computer some place. A number of local Internet Providers allow "shell" accounts. The Unix shell is what gives you a command line prompt (like QDOS or MS-DOS). Once you access your Unix account from your QL (via modem) you are on the Internet.

Even though the Web was designed to be used with a graphical interface, there is a VT100 Web browser called Lynx. It will view a web page (without any graphics) and allow you to move through the document and hot links.

Gopher originally came out as a VT100 application so there is no problem using gopher with a QL. If your Internet Provider does not have gopher installed, you can still get access. Enter the following command:

telnet consultant.micro.umn.edu

## *The QL and the Internet - (cont'd)*

This will then connect you to a gopher client and allow you to browse the Internet.

Most USENET readers (tin, nn, & rn) support VT100. Once you figure out how to use them, reading USENET is a snap.

FTP, Telnet, Finger, and Mail are all VT100 capable applications. Once you have a Unix account, you can use them all. As for what is available on the Internet that is worth while being accessed using VT100. Here is a short list:

FTP: There are a number of Sinclair FTP sites that have sinclair related files. Try ftp.nvg.unit.no, garbo.uwasa.fi, or maya.dei.unipd.it.

### ***Telnet:***

Archie (a way to look up stuff available on FTP servers).

telnet archie.sura.net

telnet archie.unl.edu

Newspapers Online

telnet kanga.ins.cwru.edu

Weather Services

telnet downwind.sprl.umich.edu 3000

### ***Gopher:***

Catalog Mart

gopher catalog.savvy.com

Census Information

gopher gopher.census.gov

Currency Exchange

gopher caticsuf.csufresno.edu

Electronic Journals

gopher gopher.eneews.com

### ***Finger:***

Almanac of Events

finger copi@oddjob.uchicago.edu

Earthquake Info

finger quake@gldfs.cr.usgs.gov

NASA Headline News

finger nasanews@space.mit.edu

### ***Mail:***

Archie Mail Servers

mail archie@archie.sura.net

(with SUBJECT of help)



## *The QL and the Internet - (cont'd)*

Fax via Internet (send a fax via e-mail!!)  
mail tcp-faq@town.hall.org  
mail tcp-coverage@town.hall.org

FTP via E-Mail  
mail ftpmail@decwrl.dec.com  
(in body of message put help or ftplist)

Finger via E-Mail  
mail infobot@infomania.com  
(with SUBJECT #HELP)

Gopher via E-Mail  
mail gophermail@calvin.edu

The above is just a small listing of what is available even if you only have a VT100 interface. In fact, if you have E-Mail only access to the Internet you can still get a large amount of information (just takes a little more work).

**An Example:** I have Internet access through work, including a Unix account (or two). Recently I got the urge to get myself a Web Home page. Since the computer at work is government owned, I could not put the Web page there. I found a Internet Provider that has a Web-only service. For \$24 a year they will host my Web page and redirect any incoming mail to my real mail account.

For fun I decided to see how much of this page I could create from home. A Web page is written in a mark up language called HTML (hypertext mark-up language). It's just a text file with some imbedded HTML commands. Once I learned the basics of HTML, creating the pages was fairly easy. Once they were created (on the QL) I was ready to send them to my Internet Provider. I dialed into my Unix account at work. On the Unix box I used the command:

```
cat > file.name
```

This takes all the incoming data from STDIN (the keyboard) and puts it in the file called file.name. Then in QEM I selected ASCII Send, and QEM copied the file to Unix as if I were typing it in.

Once all of the files were there, I FTPed the HTML files to my Service Provider. Using FTP I entered my account and password transferred my files to my subdirectory on the Web server, in a few minutes. The Web server wanted my main page to be called INDEX.HTML, so once that file resided in my home directory, my home page was up and running.

Then I used Lynx, on my Unix account, to view my new home page. I went through the pages, testing all of the links to the other pages. Obviously there were a few changes I had to make (nothing is perfect the first time). But soon all was ready.

**Just Do It:** If you yearn for Internet access but fear that the QL is not up to the job, don't worry. Just get out there and get connected and see all that you can do, even with the QL.

Having about 7 years of Internet experience, if anyone needs any help I'm willing to assist. You can reach me at:

Tim Swenson  
5615 Botkins Rd. Huber Heights, OH 45423  
(513) 233-2178  
<http://www.service.com/swensont/>  
[swensont@mail.service.com](mailto:swensont@mail.service.com)

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## NEW PRODUCTS FOR QL

**QPLANE** - The Powered Back Plane for the QL is now in stock. It utilizes a PC Power Supply Unit to help you place your QL motherboard, drive interface, Qubide, etc. inside a PC tower case or full sized desk top case. Add a Super Hermes, Falkenberg Keyboard Interface, or one of our new Di-Ren Keyboard Interfaces plus an IBM style keyboard and it is set to go. Price for Qplane is \$52.

**SPECIAL COMBO of QUBIDE and QPLANE** - This includes the Qubide IDE/AT hard drive interface and the Qplane for only \$160. Give your QL an update and power as a personal computer!

**DI-REN QL KEYBOARD INTERFACES** - This will allow you to use a 101 or 102 key AT keyboard (good name brand is recommended) with your QL. This is a very small size board and is easily fitted. It translates most keys to QL format and offers keyboard record/playback facilities. The price is \$55.

**AMADEUS QL CONTROLLER** - Designed to link the Sinclair QL to the Amadeus system. This device connects to the QL's ROM port thus enabling high speed communications. Comes with a through port allowing other devices using this to continue to function. The price is \$70.

**AMADEUS AMA-SOUND** - Record and play back sounds via your computer. This device employs 12 bit sampling and gives the high quality audio of the ADPCM algorithm. Recorded files may be stored, edited and replayed. Includes all hardware and software. Sample data is in 4 bit packages. All data can be transferred between different types of computers. 3 bit sampling may also be employed. The price for this latest innovation is \$84.

# A New House For The QL

Annandale, Virginia, USA - LeBaron H. Washington

After years of tolerating various components of my QL "system" and all of the interconnecting cables associated therewith, occupying most of the space on my desk, I decided it was time to take action.

At this point the "system" consisted of the following:

- The QL (in the lower half of it's case.)
- Two 5 1/4" floppy disk drives.
- Two 3 1/2" ED floppy disk drives.
- One 540 Meg IDE hard disk drive.
- One AT style keyboard.
- One Expansion Board
- One Super Gold Card.
- One Qubbesoft IDE hard disk card.
- One Faulkenberg keyboard interface.
- One Hayes compatible 2400 Baud modem.
- One overworked QL power supply.
- One 250W PC switching PSU (to power the drives)

My intention was to someday incorporate this collection of hardware into a TOWER case, and life would be beautiful and I could again see the top of my desk.

To move this project ahead, I purchased a "Mini Tower" case measuring 13 1/4" high by 7 1/8" wide and 16 1/8" long. I knew it would be a close fit to accommodate the QL motherboard but thought it a possibility.

The new case had a spot-welded inner structure designed to support the PC motherboard oriented vertically, and the satellite plug-in boards inserted from the back. It became immediately apparent that the inner structure had to go. At the front of the case (behind the plastic trim panel), there was a separate bracket which extended from the approximate mid-point vertically to the bottom of the case. This bracket supported the loudspeaker which was supplied with the case. It was necessary to remove the bottom portion of this bracket so that the QL motherboard could extend into the cavity behind the plastic front trim panel.

The cage designed to support the back end of the PC expansion boards projected in towards the center of the case and would interfere with the "Powered Backplane" of the QL. This was removed. The case as received had a circular opening in the back panel which I believe was provided for the PC keyboard connector to plug into the motherboard. I made an adapter plate to fit over this opening and support a seven circuit circular DIN receptacle which is the connection for a RGB monitor. Across the back to the other side at about the same height, I put a hole approximately 5/8" in diameter to mount another circular DIN connector, this one being a 5 circuit connector for the keyboard cable.

This Tower Case has on the front panel the power on/off switch; openings for 2, 3 1/2" Floppy Drives, and 2, 5 1/4" Floppy Drives; a LED display showing the CPU operating frequency; a reset switch, a turbo switch a key lock switch, and LED pilot lights for Power(ON), Turbo, and HDD access. To date I have not connected the Lock switch or the Turbo switch.

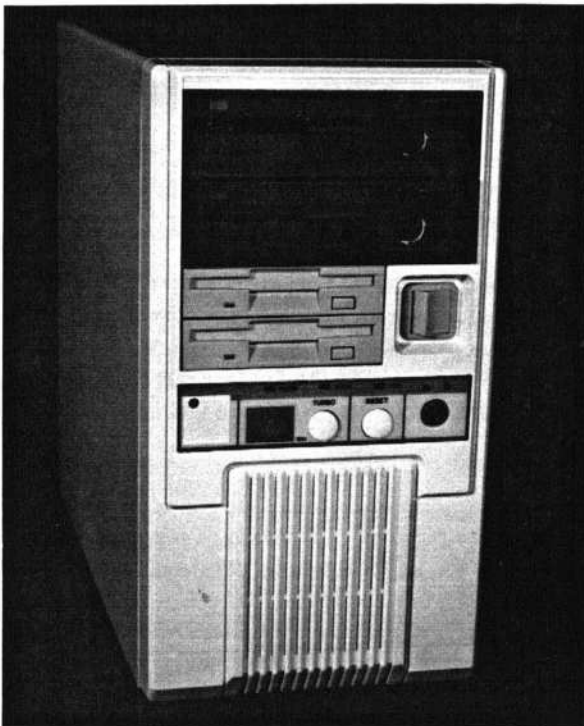
The QL motherboard was removed from it's case and the 5V. regulator, it's heat sink, the standoff post and the socket for the regulator were removed from the board. A jumper was soldered into the board between the pad for pin one of the regulator and the pad for pin three of the regulator. This was installed on the bottom (or trace) side of the board. Then reason for doing this is that the whole system will be powered by the 250W PC switching power supply. The reset switch was removed (desoldered) from the board and pins made of brass wire were formed in a "L" shape where the short leg will be soldered into the PC board and the long leg will plug into the connector on the leads from the front panel "Reset" switch. The pins are bent to conform to the pin spacing of the connector on the reset switch leads. There are six solder pads associated with the reset switch. Two of these are electrically inactive.

## A New House For The QL - (cont'd)



### RESET SWITCH PADS VIEW FROM TRACE SIDE OF MOTHERBOARD

I decided to mount the motherboard on stand-off insulators spaced 3/8" up from the bottom of the Tower Case. The reasons for doing this were to avoid a lip turned up at the bottom of the opening at the front of the case and to provide space for running wires under the motherboard if necessary and to allow the passage of cooling air under the motherboard. I used three commercially available nylon threaded stand-off insulators and three specially made threaded delrin stand-off insulators. The delrin insulators were made with a shoulder and a 5/16" projection about 1/32" long to fit the three 5/16" holes in the motherboard. All of the stand-off insulators were threaded thru with a 6-32 NC thread. In addition to the six stand-off insulators, I made six delrin pylons which were located under the centers of the six socketed chips (20 pins or more), these pylons were fastened to the bottom of the Tower case, but not fastened to the motherboard. The purpose of these is to minimize destructive flexing of the motherboard during chip removal or insertion. The 3 pin socket for the QL power cord was removed from the motherboard since the QL will now be powered at the Backplane.



*Tower Case Front View*



*Rear View ( Back Panel in Place)*

The Tower case as received had openings for the previously mentioned keyboard connector and openings for 2 nine pin "D" connectors and openings for two DB25 connectors. With the thought that the expansion of the QL's capability will undoubtedly require additional thru-the-case connectors, I have designed and fabricated a back panel for the Tower case which provides positions for six additional connectors, three 9 pin "D" and three DB25. The opening for the 9 pin "D" connectors will also accommodate the 15 pin "D" connectors used for VGA Monitors. Openings for connectors for the Joystick ports and openings for the Network ports could easily be incorporated.

I can now see the top of my desk again --- the world is full of enlightenment --- and the QL works like a dream.

*Editor's Note: Barry would consider fabricating back panel's for QLer's if there is sufficient interest. Barry can be reached through IQLR.*

# Greeting Cards with LINEdesign

Sunnyvale, California, USA - James D Hunkins

While PC users have had different programs available that make it easy for them to create greeting cards, the QL world doesn't have such convenient tools (yet?). Many of those people have found out just how fun and unique creating their own personal cards can be. In fact, some people create custom cards as a side job (my sister for example brings in several hundred dollars spare cash every month doing this in her spare time).



It turns out that we QL users actually do have a relatively simple way of creating such cards. Just about any graphics program will do. However, LINEdesign makes the job very easy and can help you produce some very sharp looking cards.

LINEdesign's vector based graphics are the key. By using vectors instead of bitmaps, LINEdesign allows for easy resizing without quality loss or distortion. It is also well enough written where most functions that you might want for graphics manipulation are readily available.

Additionally, LINEdesign is shipped with a healthy collection of clip art and a large number of vector fonts. These fonts also include groups of 'Dingbats' which are actually small, simple pictures that are mapped into letter positions. Examples follow later.

While card designing is actually an art (don't worry, just about anyone can do it), there are some basic steps to get started. This article will outline the steps that I use. And through the use of several examples, it will give some tips and tricks that I work with. These are related to both LINEdesign use and graphical design. Even though this article does not assume a complete mastery of LINEdesign, it assumes some basic working skills and exposure to the program. In other words, if you haven't used LINEdesign yet, play around it for a bit first and then try your hand at the greeting cards business.

**Making a Template - Print Setup:** To keep things simple it is important to make sure that your printer driver matches your printer. Additionally, most printers do not print to the very edge of the paper. This step is a bit tedious but it only has to be done one time. It will make your final results much easier to produce and they will look more professional.

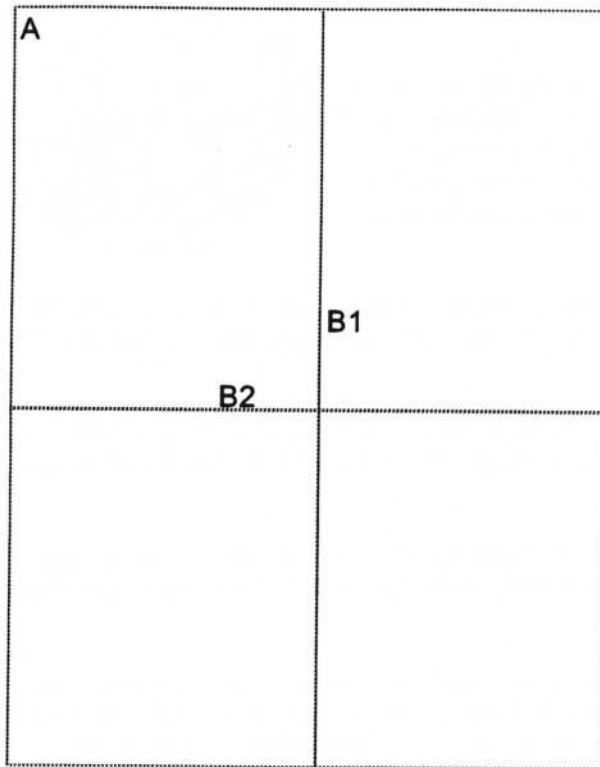
The objective of this first step is to print a sheet of paper with a thin line going around the outer edge of the printable area. I use an Epson Stylus Color printer and for this article's development I used letter size paper (8.5" x 11"). For my particular printer, my border line sits in 4mm from the top edge, 4mm from the left edge, 11mm from the right edge, and 17mm from the bottom. I suspect that most readers will also find that the printable area border will not be an uniform distance from the paper edge.

Using the instructions for adjusting the printer drivers that are supplied with PROforma based programs (such as LINEdesign), I was able to find these dimensions. The most useful tip for this process is to set the x/y offsets to 0/0 on the first test and then go from there. Also, instead of using a solid black block (ink wasteful and information limited), I drew a series of four boxes on the LINEdesign page starting at the outer edge of the paper size and then incrementally smaller. The LINEdesign version that I have only supplies an A4 page outline. Therefore my outer box did not exactly fit the outline on the screen. Instead I fit it around the letter page dimensions (8.5" x 11").

It turns out that in my case, to adjust the paper size, I only had to follow the instructions to change it from the A size that the printer driver was shipped with to the letter size I am using. Then with a mild tweek on the offset, I was able to find the printable area (which was not that which was given in my printer instructions, but close).

**Drawing the template:** Now that you know the physical dimensions and placement of the printable area for your printer, it is time to draw the first part of the template. With a line Thickness of 0.00, an Outline Color of 60, and Fill = No, draw a rectangle (A in Figure 1) around the outer edge of the printable area on the paper. Test print this to make sure all four sides are visible. This 'border' is used to make sure that anything you draw in your card will indeed be printable.

## Greeting Cards with LINEdesign - (cont'd)



(Figure 1)

Now you need to draw two lines, also with a Thickness of 0.00 and Outline Color of 60. The vertical line (B1 in Figure 1) goes from the top to bottom edges of the rectangle we just drew. It should be positioned exactly in the center of the paper and is used as a fold line. For the letter format (8.5" x 11"), it will be exactly 4.25" from both the left or right side of the paper's edge (not from the rectangular box).

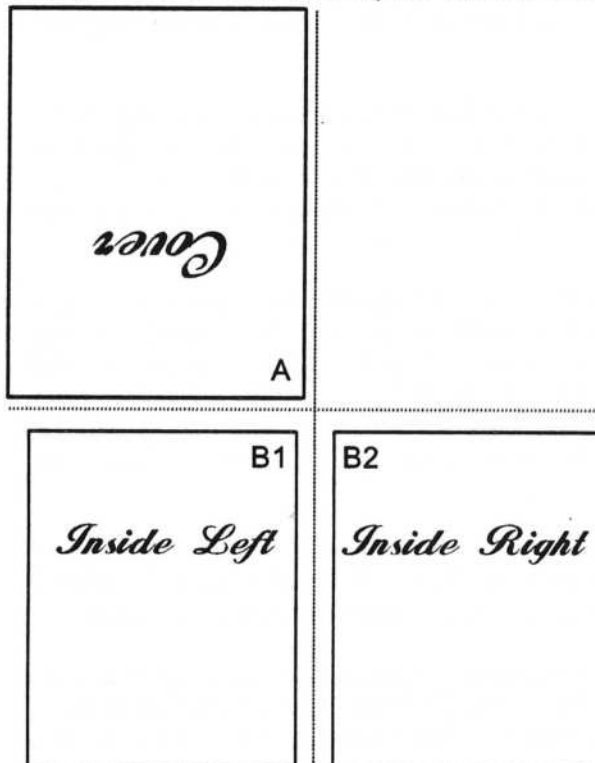
The second line (B2 in Figure 1) is also a fold line. It is placed between the left and right borders of the outer rectangle. It should be positioned exactly halfway between the top and bottom edges of the paper. For the Letter sized paper this would be 5.5" from both the top and bottom edges of the paper.

The reason for using Thickness = 0.00 (this tells your printer to draw the minimum width line that will be visible) and Outline Color = 60 is to indicate to you that these lines will not be visible during the final printout of the card. They are being used simply as guidelines.

Save your template under whatever name you choose. We have just a few more things to add before it's done, in case of an unforeseen problem,

you won't have to repeat the preceding steps. A little precaution goes a long way.

**Folding the Card and its Pages:** The idea behind making a card is very simple. By folding a rectangular sheet of paper in half twice, it allows us to print out a cover page and the two inside pages on a single side of paper. Figure 2 shows how the pages actually occur. By first folding the paper in half between the A and B1/B2 sides, and then folding it again in half between the A and blank pages, we have a openable card.



(Figure 2)

Now we will add the last pieces to our template. The fact that our printer does not print to the very edges comes back to confuse us. But it is really easy to position the pages so that they will look balanced on the final printout. We will draw a rectangle for each of the pages we will be working with to outline the area that we can draw/write in while maintaining a balanced layout.

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**Cover Page Outline:** Lets start with the cover page rectangle (A in Figure 2). Ignore for now that the word Cover is upside down. The idea is to position the rectangle within the printable area but leave an equal distance between the edge of the paper (left and top) and the center fold lines. Enlarge your image so that this upper left hand quadrant almost fills the screen. Select the rectangle icon and then place your cursor over the upper left hand

## ***Greeting Cards with LINEdesign - (cont'd)***

corner of the rectangle that outlines the drawable space for your printer (A in Figure 1).

Make a note of this distance from the top and left edges. The distance is given by the x,y coordinates displayed in the upper left hand area of LINEdesign. In my case it was 4mm from both edges. Draw a rectangle from this point, with the opposite corner being placed squarely over the intersection of the two lines that divide the paper into four quadrants (B1 and B2 in Figure 1). You should now have a rectangle that covers the upper left hand quadrant of the page.

The final adjustments to this rectangle are simple. Make sure the rectangle you just drew is still selected. Place the cursor over its right hand middle red block. With the right hand mouse button, select this edge. Move the edge of the rectangle left the same distance as the other side of the rectangle is from the paper edge, which you previously wrote down (in my case it was 4mm). Place the edge there. You can see how far you moved it by again watching the upper left area of LINEdesign to see how far it has moved. I found this method easier than measuring and adding/subtracting numbers which invariably led to mistakes.

You need to adjust the bottom edge of the rectangle the same way using its middle red block. Drag it so that it is the same distance from the fold line (B2 in Figure 1) as the top edge of the rectangle is from the paper edge (again in my case it was 4mm).

This rectangle will be where you draw your cover image and text. This is a good time to again save your template just in case. Only two more rectangles to go and we will be able to start designing cards!

***Inside Page Outlines:*** While the cover sheet was dependant on the left hand edge of the printable area for its positioning, the inside sheets (B1 and B2 in Figure 2) are just a bit different. Since the card will open so that both pages will be visible, it is important that they are both identical in their size and positioning in relationship to the card edges and its folded center.

Determine whether the left or right hand edge of the printable area is further from the paper edge. You will use this for both pages. In my case, the left hand edge was only 4mm from the paper edge, while the right was 11mm, so I used 11mm for both sides.

For the left hand inner page (B1 in Figure 2), after choosing the rectangle tool, position the cursor at the distance you just determined from the left side of the paper and touching the bottom edge of the drawable space rectangle. Again, write down the distance from the bottom edge of the paper (the paper length, in my case 11", less the y coordinate shown by LINEdesign, in my case 17mm total). Draw a rectangle from this position to the intersection point of the two fold lines (B1 and B2 of Figure 1).

Now move the right hand edge back towards the left the same distance as the left side of the rectangle is from the paper edge (in my case, 11mm). Move the top edge towards the bottom the same amount as the bottom edge of the rectangle is from the paper's edge (in my case 17mm).

For the final rectangle, you repeat the last rectangle but in reverse on the facing page. Start the rectangle at the same distance from the right side of the paper as you did on the last one from the left. This corner also touches the bottom edge of the drawable space rectangle. Draw this rectangle to the intersection of the two fold lines.

Move the left hand edge back towards the right the same distance as the right side of the triangle is from the paper edge. Move the top edge towards the bottom the same amount as the bottom edge is from the paper's edge.

You have now drawn the three rectangles showing the area that you should use for drawing and writing in for your card. To be consistent, change the attributes for each of the three rectangles so that they have a Thickness of 0.00 and Color of 60. You may optionally delete the outer print area rectangle and the two fold lines if you wish. They are no longer necessary.

Save your drawing. Your template is now complete and you will be using it to start every card you wish to design from this size paper. Check it out by printing it and folding it to see how it works. When you print out your final card you will either delete or make invisible the outlines for each of the three pages. To make them

## ***Greeting Cards with LINEdesign - (cont'd)***

invisible, set their Color to 0. A caution on that approach though. Just in case any of your drawings/text touch the lines, make sure that you place the outline rectangles in back. Otherwise the 0 Color setting will hide whatever overlaps the outline rectangle.

**Examples - Cover Sheets:** At last, it is time to get creative. Here are some quick examples that I drew up to illustrate some of the techniques and design rules that I use. Remember there are always different ways to do things and all rules can be broken. Try it. Just be sure to print it out before your final decision, because the screen doesn't always match the final result (mainly due to optical tricks that your eyes and brain throw at you).

To start a card, load the template. Now before you do anything else, save it back under a DIFFERENT name. You don't want to accidentally overwrite your template after all that work! I keep a separate backup copy of my template just in case.

Now, how do you get around the annoying fact that the Cover image must be upside down (see the word Cover, A in Figure 2) for the card to fold properly? Forget about actually designing the cover page upside down. Unless you are wonderfully gifted and/or twisted, it won't work.

The answer is to first design it as you would normally do, right side up. When you are completely happy with your cover page, select and place your complete cover (nothing else) into a single group. Then from the Edit menu, choose Transform and then Rotate. Rotate the group 180 degrees. Done; your artwork is now properly upside down but will appear correctly when you fold your card!

You can either draw your card from scratch or import clipart. Then add some text, and we're done (so I tend to over simplify a bit). To add clipart into your card's drawing, use the Files / Merge menu commands. I found that as soon as I bring an image into the drawing, it works best to immediately make the image into a single group. Then I resize the image to about what I need and proceed to move it to approximately where it should be located. After that I can safely fine tune the image as required.

**Visual Flow:** The first example shown has to do with visual flow. This is simply the sequence of things that your eyes look at when they see an image. The idea is to force the viewer to automatically look at what is important.

While viewing the included examples, the rest of the magazine's page can be distracting. I recommend that you get some blank white paper and use it to cover everything on the page except the figure that you are looking at. While not necessary, this really does help you visualize what the image would look like if it was a stand alone card. This trick is common among photographers.

A classic bad visual flow is shown in Figure 3. When you first look at it, you might notice the tendency of your eye to wander off to the right of the image. This happens due to two different things. The first is that the graphic (the officer of the law) is looking and walking out of the picture. It is natural for humans to wonder what others are looking at or where they are going. So you look to see (I know that it is just a picture, but our brains get a bit conditioned like that).

The other problem is that there is no predominant item in the image to grab our attention. Notice that all the text is fairly light and uniform.

Now look at Figure 4. Better? It should be. Here the officer is walking into the picture. The text in the upper right hand corner is darker, bolder, and not uniform like the rest of the text. The eye sees the graphic of the officer, then travels to the right with the officer. But it hits and stays on the strong bold text. Consider this almost as a block. Then it is natural once our eyes are centered on the card to look towards the bottom and continue reading. This is considered a good visual flow.

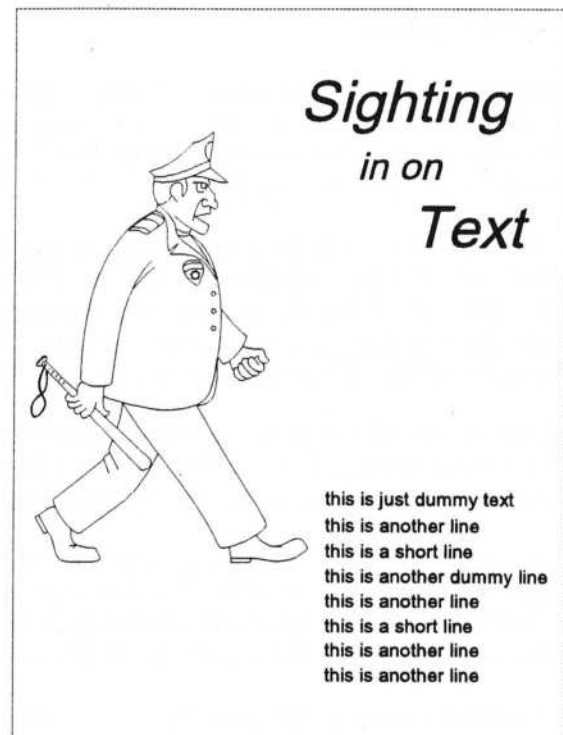
**Using Dingbats:** The example shown in Figure 5 is a bit more fun (that is if you aren't too tired of holiday images by now). It depicts a typical winter holiday type card cover. However, there are several neat things involved with it.



## Greeting Cards with LINEdesign - (cont'd)

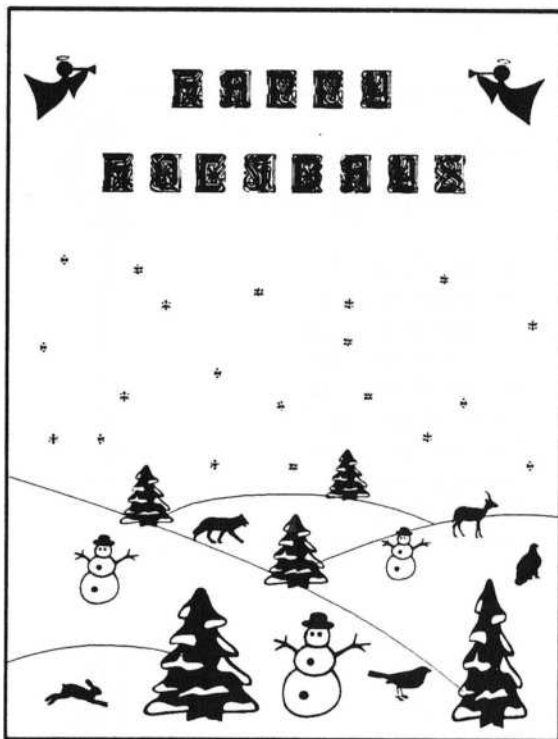


(Figure 3)



(Figure 4)

First on the list is that it uses Dingbats (quit laughing). LINEdesign comes with a large number of fonts. Some of these fonts are called Dingbats and are collections of vector based pictures. Actually, when you think of it, LINEdesign fonts are nothing more than collections of vector based pictures of letters and characters. In some cases Dingbats are not letter or character based. But you access them just like you do regular letters.



(Figure 5)

This example uses two sets, Christmas and Animals. You load them just like you do any other font. I first drew the hills with some simple curves. Then I picked out the dingbat pictures that I wanted and collected them just outside of the picture (just to keep things neat for now). For example, to get the snowman I used, choose the text option, make sure the font is set to Christmas Dingbats, position the cursor where you want the picture and press the left mouse button. Then type in the equivalent character according to the font's listing in the LineDesign instruction manual. For the snowman use an '\*', for the tree use a ';'. I made several individual copies of each as I planned to use duplicates in my image. Do the same for the animals with the Animals font selected.

Now you can treat the pictures just like any other vector based clipart you might be using. By selecting it, you can move it, resize it, etc. I took advantage of the resizing to make the items in front larger and those in back smaller to give an impression of distance. I even made one of the trees

## Greeting Cards with LINEdesign - (cont'd)

taller than the others.

Be careful that when you place one of these images over another image or line. The image in back will show through any white area. The white areas in these font based images are not 'filled' so they are transparent. It looks rather strange to have an edge of a hill showing through the snow mans face. Just move or resize the image a bit and you can usually avoid this.

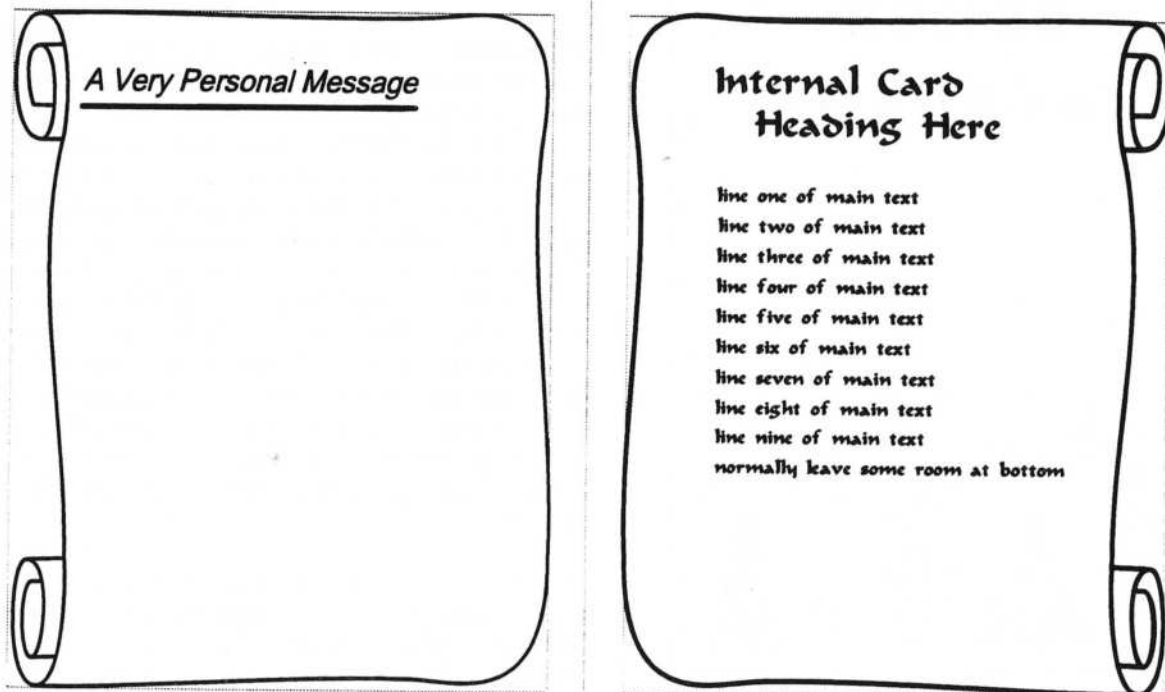
One feature that seems to be lacking in my version of LINEdesign is mirroring (rather strange with everything else they included; maybe I just can't find it). This was a problem when I wanted the angels to be facing each other. There is an alternate method of mirroring. Add the character to be mirrored. Now choose Edit / Transform / Envelope from the menus. In order for a font character to be put into an Envelope, it must be converted to curves. The program will ask for permission to do this. Say yes.

At this point you should see a red rectangle around your character with green boxes in each corner. Grab the two left hand boxes one at a time and drag them past the right hand boxes so that they are the same distance but on the right side instead. You should now have your image mirrored.

The text in this cover design, Happy Holidays, is done with CarrickCaps. I used the text - Paragraph mode (using the right button instead of the left). This allows you to set all of your spacing, center everything, etc. It frees you from having to manually space and position each character (which is very tedious). I do recommend that you turn on the grid markings before using this to help you align your paragraph block.

The final trick is simple. The snow flakes are actually asterisks from the Style font. I originally did them with a Color of 100 and they looked fine on the screen. However, on the print out they looked like dark something or others. Not good. But by changing their Color setting to 60 they lightened enough on the printout to give that softer hazy impression that light large snow flakes usually have when they fall.

**Examples - Inside Pages:** Mirroring: Figure 6 is the first example of the inside card pages. Here I used one of the LINEdesign borders and mirrored it between the pages. Mirroring the border is similar to when we previously mirrored the angle dingbat (sorry, that does sound strange, doesn't it?).



(Figure 6)

## Greeting Cards With LINEdesign - (cont'd)

First, merge two copies of the border into your design, one for each page. Make sure that you group each of them as soon as you merge them. Resize each one so they fit exactly within your page outline rectangle. Just as last time, to mirror something use the Edit / Transform / Envelope command. In this case you will get a message that says groups of objects can not be placed in an envelope.

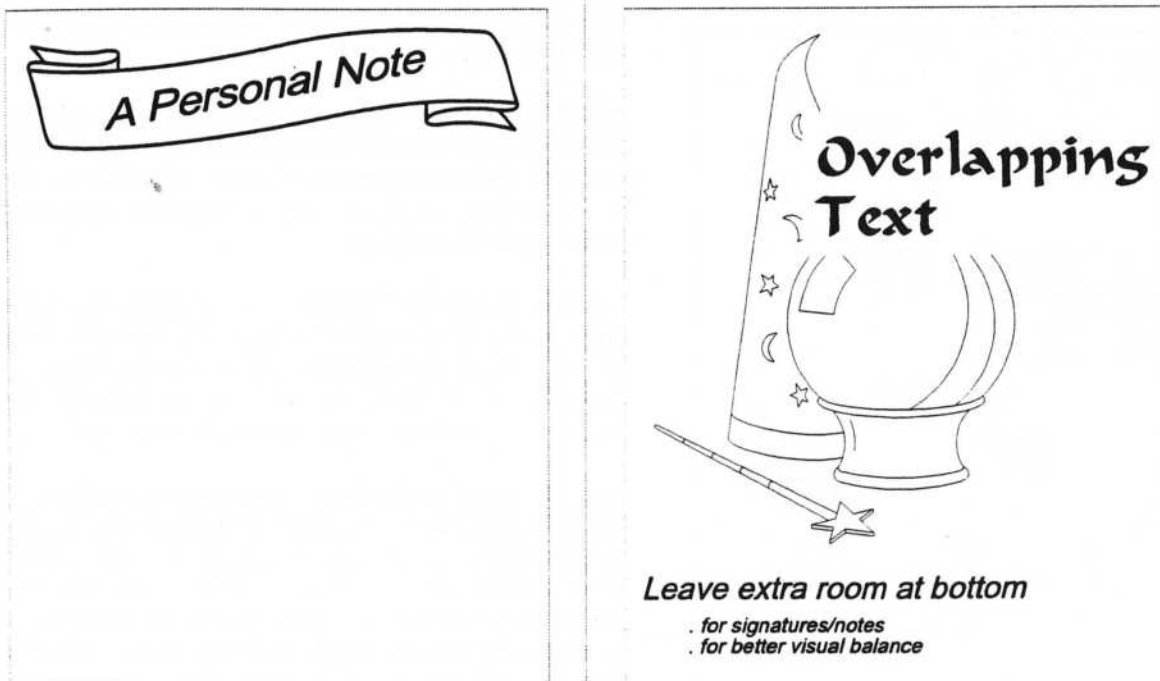
I recommend that before you break the group apart, you move it away from everything else (I moved it off the actual page). Other wise it might be hard to just select the object(s) you want to put in an envelope.

After moving the border use the Edit / Ungroup commands to split it into separate objects. You then need to select all the objects (but don't regroup them). Now redo the Edit / Transform / Envelope command. Move the two left hand corners so they are now on the right side. Don't worry about exact distance, just keep your lines straight and be somewhere in the right area. Regroup this mirrored version of the border and move it back to where it belongs. Resize the new border's width so that it fits snugly within the page's boundary rectangle.

**Text and Fonts:** Figure 6 also can be used to make a few points about proper use of fonts and text. The right hand inner page is traditionally where verse or formal notes are placed. Here you see a heading done in larger, bolder type. Again, this captures the eye. Once there, the eye will tend to naturally fall down the page, reading. Notice that the bulk of the text is smaller and lighter. Otherwise, the page becomes too 'noisy' and bulky. Also, only two fonts are used on both the internal pages. A common error is to get totally carried away with using different fonts and sizes. However, all that usually does is to clutter the image and confuse the eye. Remember, you are trying to express something clearly and simply. The experience should be pleasurable to the reader. Keep your usage of fonts and sizes down. Use just enough variety to avoid a boring look and to direct the eye's flow.

The other thing I did here is to put a formal area for a personal hand-written note. Just a little favorite touch of mine. Be sure to include in your cards this kind of distinctive and personal look, as per own individual preferences.

**Mixing Graphics and Text:** Figure 7 shows another set of internal pages where graphics and text are mixed. A couple of things can be observed from this example. First, while the graphics are meant to add meaning and be



(Figure 7)

## Greeting Cards with LINEdesign - (cont'd)

pleasing, they are usually not the major message carrier. The graphics are normally considered much less important than those on the cover page. Notice that they are done lightly, with the text header taking a definite dominating role. The eye tends to read the header while the graphics pleasantly add support to the message, almost as if they were a background thought. Of course it helps if the text and graphics have the same message as they obviously don't here.

If you just place the text over the graphics, the graphics will usually bleed into the text and be confusing to the eye. To avoid this place a rectangle around the text leaving some room on all sides of the text. Set this rectangle to have Outline and Fill colors of 0, with Fill turned on. Now using Edit, place the rectangle behind the text and in front of the graphics. This will provide that blank area you see separating the text from the graphics, but with no additional distracting boxes.

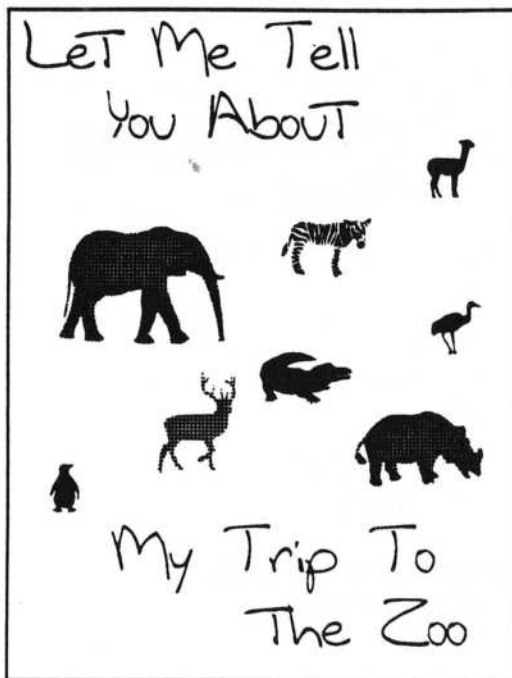
At the bottom of Figure 7, right hand side, we again leave some room. This area is often used for signatures and/or short notes. The other reason for leaving a bit more white space below than above a vertical image is to avoid the optical illusion of the image tipping outwards from its top. Next time you look at a matted photograph or painting, you will probably see the same thing being done.

Finally, the left hand page is again done with my personal note preference, but this time using a simple banner. Actually in this case the banner is a bit too bold and tends to draw from the main message on the right hand page. It might have been better to make it and the text smaller and/or lighter in color. Or of course you could leave the page blank or put something else there. It is your design and your imagination. Go for it!

**Types of Cards:** Even though a major set of holidays is now finishing, it still is a great time to get started making cards. To give you a few ideas, here are some cards you could make and send:

Holidays	- Valentines, Easter, 4th of July, Halloween, New Year's
Greetings	- Haven't heard from you for a while, Welcome
Announcements	- Weddings, Graduations, Births
Notes	- Keep in touch, Regular letter/notes, Special topics
Children's	- Special occasion, Grandparents, Thank you, Party invitation

And there are obviously many more. You might want to create basic template cards for different occasions and then simply alter them to fit the circumstances or change them each year.



(Figure 8)

**Final Example:** Young children learning to write love to send letters and notes with pictures. And most children once introduced to computers will not give them up. Here is the perfect opportunity for parents and relatives to encourage these activities.

Figure 8 shows an example of a children's card which talks about a recent trip to the Zoo. The font was chosen to look simple and childlike versus a more formal and rigid appearance. The pictures can be chosen by the child to show what they saw when they went to the zoo.

For a very young child who doesn't write yet, leave the inside pages blank so that they can draw pictures by hand of what they saw. If they are starting to write, let them write a story about their trip. If they are becoming computer literate, let them draw pictures on the computer for the inside pages or simply add more pictures with your help. As they become more advanced, they can write a short story on the computer and then use LINEdesign's Text - Paragraph option to import it to their card.

## Greeting Cards with LINEdesign - (cont'd)

When done, let the child send or give copies to their friends, parents, grandparents, etc.

**In Closing:** Even though it will take a bit to set up the template, making your own greeting cards is fun and rewarding. The people you send them too will marvel at your creativeness and appreciate the personal touch a store bought card just can't deliver.

With LINEdesign, anyone can do it using their QL based software. And like I said, it is fun. I have spend the majority of the last several days locked to my computer setting up the template and generating these examples. When I called Bob Dyl about this project, he actually mentioned that I sounded like I was having a great time. And I have been. This is really fun stuff. So try it. I am looking forward to getting some cards showing me just what QL'ers can do!

A final footnote; while LINEdesign makes creating cards easy and fun, there still is room for a dedicated program to do just that. Such a program would come with card templates for different sizes, built in centering and alignment, and probably several sample cards and a collection of special borders and graphics ideal for such use.

Such a program should not be hard to write. With PROforma being available (developed by Progs) to handle all the graphics and font/text manipulations, and a powerful 'C' compiler (C68) available, I am surprised that no one has introduced just such a commercial package. In addition, the upcoming introduction of the new window manager software by Progs (you read about it recently in IQLR) will make it even easier to complete such a project. Personally it is on my own list, but unfortunately other projects are well before it. If someone wants to try such a package (and I really hope they do), just check out one of the common PC (sorry) card programs for ideas.

# TF SERVICES

## superHermes

**Hermes** co-processor solved the major problems of the QL co-processor. **superHermes** does this and adds the following, all on a quality circuit board not much larger than the original 8049:

- All Hermes features (working serial input/ existing QL keyboard improved and debounced/ key click/ independent ser1/2 input) plus full 19200 throughput on ser1/2 input not affected by sound
- IBM AT compatible keyboard interface, configurable for all countries
- HIGH SPEED RS232 serial port (SER3) for full throughput with hardware handshaking from 1200 up to 38400bps. Higher rates possible with reduced throughput and short cables. DTR/DSR/DCD signals provided.
- THREE low speed RS232 inputs from 1200bps down to 30bps (eg serial mouse/RTTY)
- Capslock/scroll lock LED connector
- Turbo connector. IBM style panel/led can be controlled externally or by QL
- Keylock connector - to lock IBM/QL keyboard and mouse

- 1.5k user data storable in EEPROM (Electrically erasable non-volatile memory)
- Plug connectors on pcb for all relevant features

All this is made possible by the high speed RISC co-processor (PIC 17C42)

Fitting is a simple job - simply remove the top of the QL (8 screws) & replace the IC marked '8049' or Hermes next to mdv1. Can be fitted to bare boards & is especially suitable for QL boards in IBM PC style cases. QL control software is provided.

**Cost (incl manual & software) ..... £92(£87)[£90]**  
**Capslock/scroll lock LED with plug ... £1.50(£1)[£1.50]**  
**Allowance for Hermes upgrade (send IC only) ..... £10**

Complete 12" connector assemblies (specify if panel mounting):	Open ended connectors (socket & 12" cable with bared tinned ends):
Kybd (to DIN sock).....£3.50(£3)[£3.50]	9way (SER3).....£2.50(£2)[2.50]
SER3 (to 25D plug).....£4.50(£4)[£4.50]	4way (extra RS232).....£2(£1.50)[£2]
Ser mouse (to 9D plg)....£3.50(£3)[£3.50]	5way (kybd/spare).....£2(£1.50)[£2]

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MasterCard

# Things in SMSQ/E (Part 1)

Duisburg, GERMANY - Jochen Merz

As you probably know SMSQ/E contains lots of various Things. Some of the useful ones are explained in the SMSQ/E manual, and wherever an SBASIC call to any Thing exists it is documented. However, programmer's information to the various Things might be useful, as well as a bit more detailed explanation.

**THING** - this is the "add-on" vector table to provide machine code access to the new Thing system calls. There is nothing new about them in SMSQ/E, you get the same vectors when you load HOTKEY System 2. The existence of this THING is the reason why you get an "already exist" message when you try to load the HOTKEY System 2 in SMSQ/E; no point in doing this!

**SBASIC** - an executable Thing which creates SBASIC daughter jobs. The SMSQ/E manual explained the various call options in detail.

**SBAS/QD** - this is the "connection" between QD and SBASIC. Also explained in the SMSQ/E manual.

**DV3** - an Extension Thing which makes sure that if you want to remove the DV3 drivers every bit of memory they occupy will go away. However, there's no point in removing the drivers as you will loose your FLP, WIN, RAM ... can YOU think of any sensible reason?

**FLP Control** - the first interesting Extension Thing. It provides access from any language (including machine code) to the various floppy disk driver control parameters. In earlier systems, the only way to set these parameters was via BASIC commands, which was fairly limited. Here are the various Extension IDs and their parameters:

**USE** - an optional string parameter on call. Equivalent SBASIC command is FLP\_USE.

**SEC** - a word call parameter. Equivalent to FLP\_SEC.

**STRT** - a word call parameter. Equivalent to FLP\_START.

**TRAK** - a word call parameter. Equivalent to FLP\_TRACK.

**DENS** - an optional character on call. Equivalent to FLP\_DENSITY. No parameter sets it to automatic detection, I believe.

**STEP** - two bytes on call, the second is optional. Equivalent is FLP\_STEP, you probably guessed it already.

**WIN Control** - this is similar to FLP Control, but for the harddisk. Not all parameters will work on all systems, most of them are related to the ATARI version.

**USE** - an optional string parameter on call. Equivalent SBASIC command is WIN\_USE.

**DRV\$** - word on call, string on return. Equivalent function in SBASIC is WIN\_DRIVES.

**DRIV** - up to four bytes on call, third and fourth are optional. Equivalent is WIN\_DRIVE.

**STRT** - one byte on call. Equivalent is WIN\_START.

**STOP** - guess what!

**REMV** - one byte on call, followed by optional character. Equivalent to WIN\_REMV.

**WPRT** - two bytes, second is optional. Equivalent to WIN\_WP (wow, more cryptic in SBASIC this time!).

**SLUG** - one byte. You'll never guess what the SBASIC equivalent is!

**DEV** - DEV allows the setting and reading of the various DEV parameters. Although DEV exists much longer than SMSQ/E, the other DEV's don't support this Thing. The DEV Thing changed over the various SMSQ/E versions, therefore you should check the SMSQ/E version for 2.70 or higher.

**USE** - up to three call parameters: byte, optional string, optional byte. Same as DEV\_USE.

**USEN** - one optional call string. The equivalent is DEV\_USEN, which works similar as FLP\_USE or WIN\_USE.

**USE\$** - call parameter is a byte, returns a string. DEV\_USE\$ is the equivalent SBASIC function.

**NEXT** - call parameter is a byte, and it returns a byte. SBASIC function is DEV\_NEXT.

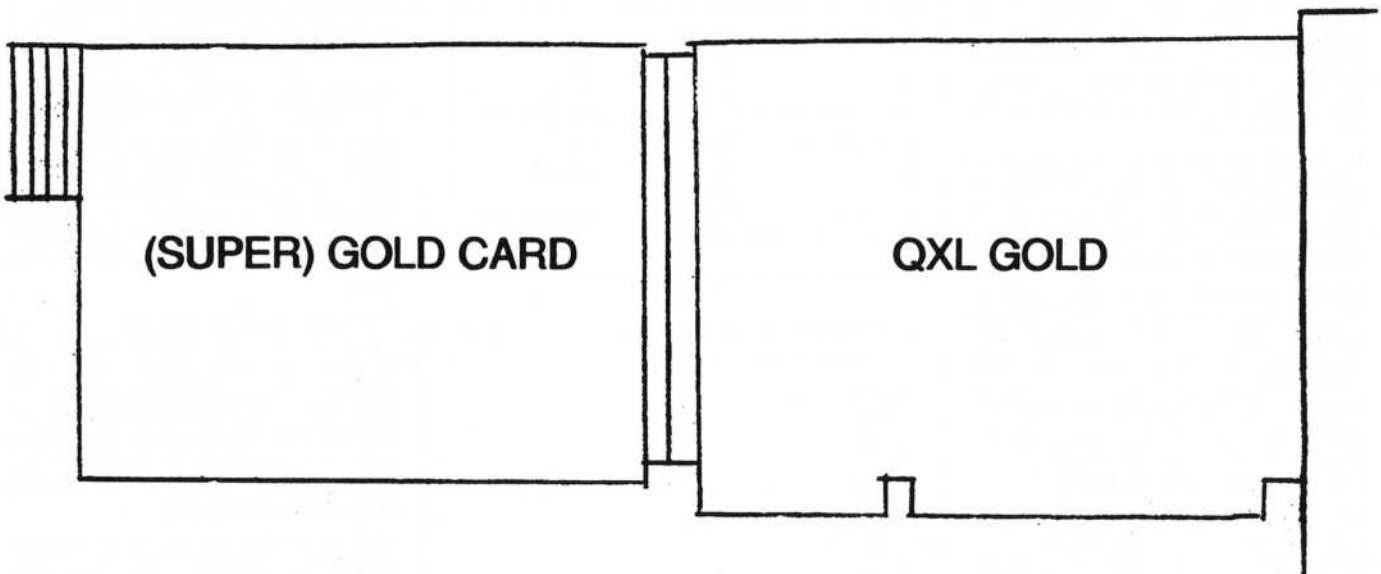
**LIST** - the only call parameter is a channel ID!

"The other Things will follow in the next issue."



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## QXL GOLD



**£100.00 fully inclusive (£90.00 outside EU)**

- \* **Alternative to the QXL**
- \* **Uses the processor and memory of (SUPER) GOLD CARD**
- \* **Low cost solution**

The QXL GOLD is a low cost alternative to the QXL. It connects onto the 16 bit (AT) ISA bus of a PC and has a QL type expansion connector onto which can be plugged either a GOLD CARD or SUPER GOLD CARD.

The low cost is achieved by making use of the processor and memory of the (SUPER) GOLD CARD so the speed will depend on the type of GOLD CARD it is used with.

It is anticipated that delivery will commence towards the end of November 1995. Orders are being accepted now. Credit cards will not be charged and cheques will not be banked until the item is ready for despatch.

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# The QL at Work and QLAY

Meriden, New Hampshire, USA - Kevin O'Leary

Tariki is a 2nd generation ceramics studio that produces a wide range of stoneware art. We make everything from platters, bowls, garden tables, to large scale ceramic and steel sculptures. Tariki was created by my father in the mid fifties. He moved the studio to Meriden in 1961. The studio has a family tradition of expanding the medium of ceramics. Eric O'Leary, the artist designer has taken the field of ceramics into large sculptures and architectural ceramics. The photographs show a production item the Chan Garden Table and a large recently commissioned sculpture. We have customers all over the world. Please call or send for additional information if you are interested in the work. Now on to the QL part of this story.

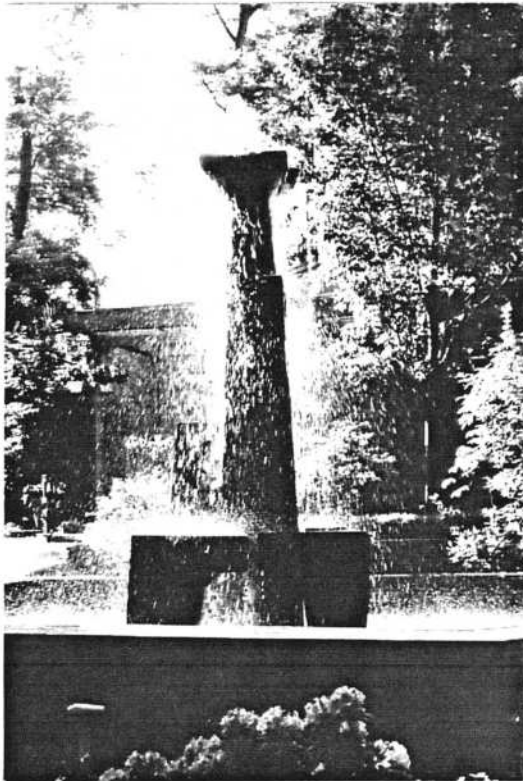
The QL has provided us with a low priced very functional computer. Mainly thanks to the very able programming and assistance of Bill Cable and his excellent financial program, Qlerk. He introduced us to the QL back in 1988 and we have been using it in all phases of our business ever since. Over the years Tariki has been used as a model for developing and testing of Qlerk and I was the main person testing it.



*(Chan Garden Table)*  
13"W x 16" L x 19"H

Our main system is a stock QL fitted with a super gold card and four HD disc drives. We use a Magnavox monochrome monitor and three printers connected via a three-way data switch. One Seikosha nine pin for address labels, one for checks, and one wide carriage Brother printer for spreadsheets and letters. I boot from flp1\_ with a Taskmaster disc containing quill, abacus, and archive. The main Qlerk database files are kept on a disc in flp2\_ and Qlerk itself resides in flp3\_ leaving flp4\_ open for general use. We also have a second system which is mainly a backup system. It is another stock QL fitted with a gold card, three disc drives, and monitor.

We also have have four additional QLs which are unused. Two need repair. I also have just started using a 2400 baud modem to explore the internet. I Have been using Delphi as a service provider.



*(Andelain Fountain)*  
6"W x 6'L x 14'H

Software that I use most frequently consists of Qlerk, Abacus, and Archive and Quill. I am becoming familiar with Perfection plus and it is replacing Quill as my word processor of choice. With Qlerk we are able to maintain an address database, do all of our bookkeeping, write checks and generate reports. We keep track of Two bank Accounts, one credit card account, and numerous dealings with galleries and customers. When we make a sale the customers address is entered followed by the details of the transaction. At the end of the month I will select income and payments by date add the electronic transactions from the bank statement, and reconcile the account. Then the data is ready for export to abacus. Qlerk provides an option which prepares an export file for Abacus with the sales/ payment records organized into their proper ledger format. I have a template prepared in Abacus so when I import the file my individual category calculations are all done. I can delete extra blank rows and print out our ledger styled reports and hand them to our accountant.

Having a solid financial program like Qlerk has been extremely important to our business. It was a little slow on our old Trump Card but with the Gold Card or Super Gold Card speed is no problem. Qlerk does all the basic things including handling payroll deductions and keeping inventory plus it has

## The QL at Work and QLAY - (cont'd)



*(Our QL System)*

features that allow us to customize it to our particular business. We are able to set up a special field to keep track of what kind of glaze we use on a particular piece. The Address database used in QLerk has over 1000 addresses which are very important in keeping in contact with our customers and doing mailings. We have had many thousands of transactions over the years without any serious loss of data. Problems have been mostly caused by disks going bad or human error. We are very careful about backing up data. Our environment is extremely hard on machinery and equipment. There is a very fine clay dust everywhere. The QL and even our disk drives have done very well considering.

We are making plans to add a Pentium PC to our computer collection. In large part we are doing this to add graphical capabilities because we will eventually need to handle our extensive photographic library in digitized form on the computer. When we mentioned this to our accountant, he got a little panic. He said he was very happy with our current reports as done by QLerk and to not waste ours and his time by changing our methods.

We were planning to continue with QLerk anyway and will use the new Miracle Board to insert our Super Gold Card in the PC. We also hope to take advantage of the QL networking capabilities and set up a terminal in our main work room to view data with out going upstairs. I have found the QL to be a very useful and I hope that it continues to be a presence in the computing world.

*Editor's Note: Kevin can be reached at: Tariki Stoneware - P. O. Box 172 - 12 Bean Road - Meriden, NH 03770 - USA. The Financial package QLerk mentioned in the article is available from Q BRANCH in the UK (please note their advert) or directly from the author: Bill Cable - RR2, Box 92 - Cornish, NH 03745 - USA - Tel: 603 675 2218.*

## Black Components

*Newport, Rhode Island, USA - Bob Dyl*

With interest in Black systems at a high level (even in the PC world), a number of readers have asked us where we obtained our own. Dilwyn Jones (who now has a Black system) supplied us with the Bytewise information. For additional sources, you can search the pages of Computer Shopper Magazine or attend PC type shows (more and more black components are showing up at these events) or contact the suppliers listed below.

Circo Technology Corp.  
222 South 5th Avenue  
City of Industry, CA 91746  
USA  
Tel: 818 369 5779  
Fax: 818 369 2769

Bytewise Technology Ltd.  
25 Downham Road  
London N1 5AA  
UK  
Tel: 0171 275 8853  
Fax: 0171 275 8344

The suppliers listed carry a complete line of Black components from: cases, serial mouse, floppy drives, keyboards, cd roms and SVGA monitors (you'll need one of these when the graphics/motherboard from Nasta and Ron Dunnett is ready - I already have mine). Be prepared to pay higher prices for Black components !!

# Seeking Applications Software!

Duisburg, GERMANY - Jochen Merz

As you all know there are not too many applications around in the QL scene. The question is: why? One reason might be, that potential programmers don't see a market in the QL scene, which is probably true. You need to be an enthusiast. However, some excellent software like QTPI and QFAX, which are very high standard and could as well be sold are PD, and if you look at other computers like the ATARI or AMIGA, you'll find that many, many people have produced excellent PD software as well, without any commercial aspect. Therefore, having the chance of earning SOME money should be interesting, I would think.

So what other reasons could exist? Are all the QL-users just "users"? Most probably not. I would think that most QL-users are "DOers". However, many of them do things just for their own use, and this seems to be the main problem. Why not program things in a more flexible way and make them useful for other people too, whether in a commercial way or as PD or shareware.

There is the chance that people find programming too difficult, but I think that is not true for most people. Programming in the Pointer Environment is not easy, agreed, but EasyPTR helps a lot. On the other hand, more PE applications appear than non-PE applications, so this can't be a real reason either. Programming QDOS or SMSQ/E is very easy compared to programming any other multitasking OS in the world, and many people proved that you can write excellent applications in BASIC - and we do have a really marvellous BASIC! You would never guess that The Lonely Joker 2, for example, is QLiberator-compiled BASIC, would you?

So why are not more applications around? Although many QL-users are very unique users, lots of them have quite a lot in common. You would not believe how many QL-users also own a Psion Series 3 or 3a! And you would not believe how many of them are searching for a proper remote control program for QDOS or SMSQ/E to link the Series 3 to the QL! If anyone has written something which does this job then, believe me, this is something which lots of people would like to have. So why not release it, either PD or as a commercial product ("commercial" does not mean you become rich, all it means is you will get some money, where "some" is quite undefined).

What about a proper Laserjet-driver for text87? Software87 has given away many sources with many example drivers away, I can't believe that no-one has written a driver yet, based on another driver. This is how the ESC/P2 and Stylus drivers came into existence - by someone who has never written a text87 driver before in his life, and it does work very well. To be more precise, he also discovered some minor weaknesses in the design of the driver interface. I can't believe it is an impossible task to make such a driver and if anyone has done it already, then be sure other people want to have it too.

Games - wouldn't it be nice to have some more games? What happened to all the games which were available for the QL and simply disappeared? Wouldn't it be possible to re-activate some programmers, try to get some sources, and slightly update the programs so that it runs on today's hardware, i.e. Gold/SuperGoldCard, ATARIs with QL-Emulators and QXL. Some of the old programs which don't work anymore do not work because of a few programming faults (or assumptions) which could quickly and easily be corrected. Do YOU know somebody who could help?

I would welcome anybody who seriously thinks he/she has produced a fairly well programmed commercial product to allow me to have a look at it - maybe it will turn out to be a "hit". I would like to program myself much more but I simply do not have the time. Most of the time is eaten up for various things other than programming. The life of a supplier is a tough one indeed.

- \* Dealing with problems and customers enquiries on the phone consumes some time.
- \* Maintaining the mailbox and the various versions of the programs including manual updates in German and English requires time.
- \* Mailshots, advertising, accounting (taxes), etc.

This plus much more leaves less than 10% of my available time (and this is over 8 hours seven days a week) for programming, unfortunately. You see, I do need some help! We all need new applications!

# Ramblings .....

Walsall, ENGLAND - Robin Barker (Di-Ren)

I intend to cover several subjects in this article starting with the EMC directive.

The EMC directive has already generated a lot of discussion and there seems little point in me adding to the confusion that already exists. I have just one statement to make regarding the subject, and that is; Di-Ren products will continue to be available until further notice.

Internet: We have established a commercial site on the Internet upon which we have reserved space for QL specific use. It is our intention to develop the QL section into a general QL Internet information service where users may, for instance,;

- Look up QL traders information and latest product details.
- Check QL magazine deadlines, subscriptions and content.
- Locate other QL Internet resources.
- Search the QL users Email database.

By the time you receive this magazine, the site should be worth a visit. Indeed, as I write, it is already possible to download Amadeus System Software, have a look at what Quo Vadis Design is up to, check out when the next IQLR deadline is, and so on.

If you are a QL trader/magazine editor and have not yet heard from us, you may be interested to know we are offering, free of charge, to place your promotion page on the site. You do not have to be on the Internet to take advantage of this offer. We can also offer you space, at extremely low cost, for storing downloadable software etc. Contact us for details.

The QL users Email database contains, obviously enough, a list of QL users Email addresses. This in fact can be any interested party from QLTraders in America, to a QL user in Iceland. So, if you have access to Email facilities, send a line giving us a few details about yourself, eg; Southampton Quanta Subgroup, Joe Notsopot - QL Trader. In order to maintain some sense of security regarding the Email addresses, only subscribers to the database are supplied with the database address.

The site address is: <http://www.forthrt.com/~di-ren>  
To Email me: [100736.1316@compuserve.com](mailto:100736.1316@compuserve.com)

Di-Ren Keyboard Interface: This interface has proved to be, in QL terms, something of a success. I would like to take this opportunity to thank all purchasers of the product for their support. Credit however should also be paid to Dennis Briggs, who first suggested the project and whom has proved to be of invaluable assistance since. Thanks also to a second person, (whose name fails me at present, but I believe he may have something to do with IQLR's editorial department), for mentioning that I should be getting on with and not just thinking about the project!

QL survival and apathetic users. (Item also made available to QUANTA): As we all know, the QL user base is shrinking. This unfortunately is a fact of life, and whatever dreams some of us may have, nothing can be done about it. What we can do however, is to reduce the rate of shrinkage. When it first became apparent Miracle Systems were pulling out of the QL, how many times did I hear statements of the "death knoll for the QL" variety. Is nobody else capable of producing hardware for the QL? Of course they are!

For the QL and it's associated community to survive, what is needed is the community as a whole to make an effort. Do not expect a small minority to do it all for you. If you want support from the community, then be prepared to contribute! Share those pieces of software you've created for your own use, write about your experiences. Comment on QL products and magazine articles etc. If you have ideas for new software and hardware, make them known!

*Get involved, before it's too late! Or face the Microsoft Corporation alternative.*

# LANG\_BAS

Le Grand Pressigny, FRANCE - Tony Tebby

*Editor's Note: The following SBASIC program was inadvertently not sent along with the text for the article "SMSQ Language Dependent Modules" printed in Volume 5 Issue 1. This listing should have been printed at the end of the text on page 12. Please accept our apologies.*

```
1000 REMark - Make complete language module for alternative English
1010 :
1020 fch = FOP_OVER (win1_lang_rext)
1030 :
1040 WPUT #fch, $7030, $43FA, $6, $4E41, $4E75
1060 ldm_link = 0 : REMark no language dependent links yet
1070 :
1080 make_ldm 0,0, 440, ldm_link, eng_pref : REMark - set up LDM preference header
1090 make_ldm 1,0, 440, ldm_link, eng_kbd : REMark - set up LDM keyboard header
1100 make_ldm 3,0, 440, ldm_link, eng_ms0 : REMark - set up LDM message g0 header
1110 make_ldm 3,4, 440, ldm_link, eng_ms4 : REMark - set up LDM message g4 header
1120 make_ldm 3,8, 440, ldm_link, eng_ms8 : REMark - set up LDM message g8 header
1130 make_ldm 3,12, 440, ldm_link, eng_ms12 : REMark - set up LDM message g12 header
1140 :
1150 set_ldm_pointer eng_pref : REMark - set pointer to pref table
1160 BPUT #fch, 'GBA ' : REMark - set modified car registration
1170 WPUT #fch, 440,44,0 : REMark - and preferences
1180 :
1190 set_kbd_header eng_kbd, 440,512 : REMark - set IBM PC size keyboard
1200 :
1210 BPUT #fch, 0,$1B,'1','2','3','4','5','6','7','8','9','0','-','=','C2,$9
1220 BPUT #fch, 'q','w','e','r','t','y','u','i','o','p','[','$A, 0,'a','s'
1230 BPUT #fch, 'd','f','g','h','j','k','l',';','$27,$9F, 0,'#','z','x','c','v'
1240 BPUT #fch, 'b','n','m',';','/,' 0,'*', 0,' '$E0,$E8,$EC,$F0,$F4,$F8
1250 BPUT #fch, $D1,$D3,$D7,$D9,$DB, 0,$F9,'7','8','9','-','4','5','6','+','1'
1260 BPUT #fch, '2','3','0','.', 0, 0,'\'$,DF,$E1, 0, 0, 0, 0, 0, 0, 0
1270 BPUT #fch, 0, 0, 0, 0, 0, 0, 0,$D5,$D0,$D4, 0,$C0, 0,$C8, 0,$DD
1280 BPUT #fch, $D8,$DC,$EB,$CA, 0,'/', 0, 0, 0, 0, 0, 0,$A, 0, 0, 0
1290 :
1300 BPUT #fch, 0,'@','!','"',',','$','%','^','&','*','(',')','_','+', $C6,$FD
1310 BPUT #fch, 'Q','W','E','R','T','Y','U','I','O','P','{','}', $FE, 0,'A','S'
1320 BPUT #fch, 'D','F','G','H','J','K','L',';','@','$B5, 0,'-', 'Z','X','C','V'
1330 BPUT #fch, 'B','N','M','<','>','?', 0,'*', 0,$FC,$E4,$EA,$EE,$F2,$F6,$FA
1340 BPUT #fch, $D1,$D3,$D7,$D9,$DB, 0,$F9,'7','8','9','-','4','5','6','+','1'
1350 BPUT #fch, '2','3','0','.', 0, 0,'\'$,DF,$E1, 0, 0, 0, 0, 0, 0, 0
1360 BPUT #fch, 0, 0, 0, 0, 0, 0, 0,$D5,$D4,$D4, 0,$C4, 0,$CC, 0,$DD
1370 BPUT #fch, $DC,$DC,$EB,$CE, 0,'/', 0, 0, 0, 0, 0, 0,$FE, 0, 0, 0
1380 :
1390 BPUT #fch, $FF,'ä','ë','ï','î','ï','ö','ø','ó','ú','è','à','ç', $C2,$9
1400 BPUT #fch, $11,$17,$5,$12,$14,$19,$15,$9,$F,$10,'+', '→', $A, 0,$1,$13
1410 BPUT #fch, $4,$6,$7,$8,$A,$B,$C,'ü','ü', 0, 0, 0,$1A,$18,$3,$16
1420 BPUT #fch, $2,$E,$D,'á','ä','ë', 0,'*', 0,$FF,$E2,$E9,$ED,$F1,$F5,$F9
1430 BPUT #fch, $D1,$D3,$D7,$D9,$DB, 0,$F9,'7','8','9','-','4','5','6','+','1'
1440 BPUT #fch, '2','3','0','.', 0, 0,'\'$,DF,$E1, 0, 0, 0, 0, 0, 0, 0
1450 BPUT #fch, 0, 0, 0, 0, 0, 0, 0,$D5,$D2,$D6, 0,$C2, 0,$CA, 0,$DD
1460 BPUT #fch, $DA,$DE,$EB,$CA, 0,'/', 0, 0, 0, 0, 0, 0,$A, 0, 0, 0
1470 :
1480 BPUT #fch, $FF,$1F,'ä','Ä','é','ö','ø','↑','ø','æ','ç','ñ','↓','ö', $C6,$FD
1490 BPUT #fch, 'π','ϖ','Ö','Φ','ç','»','', 'Ñ','e','µ', $1B,$1D,$FE, 0,'Ä','ï'
1500 BPUT #fch, 'Ö','Ø','Û','Ç','Æ','Ö','α','ù','ä', $1B, 0,'"', '«','É','$'
```

## LANG\_BAS - (cont'd)

1510 BPUT #fch, 'À','Ø','ð','ß','¥','^', 0,\*, 0,','\$E6,\$EB,\$EF,\$F3,\$F7,\$FB  
1520 BPUT #fch, \$D1,\$D3,\$D7,\$D9,\$DB, 0,\$F9,'7','8','9','-','4','5','6','+','1'  
1530 BPUT #fch, '2','3','0',';', 0, 0,\,\$DF,\$E1, 0, 0, 0, 0, 0, 0, 0  
1540 BPUT #fch, 0, 0, 0, 0, 0, 0, 0,\$D5,\$D6,\$D6, 0,\$C6, 0,\$CE, 0,\$DD  
1550 BPUT #fch, \$DE,\$DE,\$EB,\$CE, 0,/, 0, 0, 0, 0, 0, 0,\$FE, 0, 0, 0  
1560 :  
1570 BPUT #fch, FILL\$(CHR\$(0),\$D0) : REMark - fill up to non-spacing chars  
1580 BPUT #fch, 0,14,0,28,0,0,0,42 : REMark - the seven non-spacing chars  
1590 BPUT #fch, 0,56,0,70,0,0,0,84  
1600 BPUT #fch, 0,98  
1610 BPUT #fch, FILL\$(CHR\$(0),\$FF-\$E1) : REMark - fill the rest with 0  
1620 :  
1630 BPUT #fch, 'aeioucnAEOUCN',0 : REMark - the modifiable characters  
1640 BPUT #fch, 'áéíóúcnAÉOUCN',0 : REMark - acute accents  
1650 BPUT #fch, 'âêîôûcnAEOUCN',0 : REMark - circumflex accents  
1660 BPUT #fch, 'àèìòùcnAEOUCN',0 : REMark - grave accents  
1670 BPUT #fch, 'æiöucñÄËÖUCÑ',0 : REMark - tilde  
1680 BPUT #fch, 'äëïüücnÄËÖÜCN',0 : REMark - umlaut or diaeresis  
1690 BPUT #fch, 'æiøuęñÄËØUCN',0 : REMark - ° or /  
1700 BPUT #fch, 'æeiöuçñÆËÖUÇÑ',0 : REMark = +e  
1710 :  
1720 :  
1730 :  
1740 set\_message\_header eng\_ms0, 440,22 : REMark - message group 0 header  
1750 :  
1760 message\_nl 'I have not finished yet!' : REMark - not complete  
1770 message\_nl 'invalid Job ID'  
1780 message\_nl 'insufficient memory'  
1790 message\_nl 'value out of range'  
1800 message\_nl 'buffer full'  
1810 message\_nl 'invalid channel ID'  
1820 message\_nl 'not found'  
1830 message\_nl 'already exists'  
1840 message\_nl 'is in use'  
1850 message\_nl 'end of file'  
1860 message\_nl 'medium is full'  
1870 message\_nl 'invalid name'  
1880 message\_nl 'transmission error'  
1890 message\_nl 'format failed'  
1900 message\_nl 'invalid parameter'  
1910 message\_nl 'medium check failed'  
1920 message\_nl 'error in expression'  
1930 message\_nl 'arithmetic overflow'  
1940 message\_nl 'not implemented'  
1950 message\_nl 'write protected'  
1960 message\_nl 'invalid syntax'  
1970 message\_nl 'unknown message'  
1980 :  
1990 set\_message\_header eng\_ms4, 440,47 : REMark - message group 4 header  
2000 :  
2010 message\_nl 'you screwed it up again' : REMark - syntax error in expression  
2020 message\_nl 'missing left parenthesis'  
2030 message\_nl 'missing right parenthesis'  
2040 message\_nl 'error in line number'  
2050 message\_nl 'bad string: missing delimiter'  
2060 message\_nl 'incorrect procedure or function definition'

## LANG\_BAS - (cont'd)

2070 message\_nl 'procedure or function definition not allowed here'  
2080 message\_nl 'DEFines may not be within other clauses'  
2090 message\_nl 'misplaced END DEFine'  
2100 message\_nl 'misplaced LOCa'  
2110 message\_nl 'RETurn not in procedure or function'  
2120 message\_nl 'WHEN clauses may not be nested'  
2130 message\_nl 'misplaced END WHEN'  
2140 message\_nl 'misplaced ELSE'  
2150 message\_nl 'misplaced END IF'  
2160 message\_nl 'program structures nested too deeply, my brain aches'  
2170 message\_nl 'incomplete IF clause'  
2180 message\_nl 'incomplete SElect clause'  
2190 message\_nl 'incomplete DEFine'  
2200 message\_nl 'incomplete WHEN clause'  
2210 message\_nl 'unacceptable loop variable'  
2220 message\_nl 'unable to find an open loop'  
2230 message\_nl 'undefined loop control variable'  
2240 message\_nl 'incorrectly structured SElect clause'  
2250 message\_nl 'misplaced END SElect'  
2260 message\_nl 'DATA in command line has no meaning'  
2270 message\_nl 'unacceptable parameters for READ'  
2280 message\_nl 'SBASIC cannot perform READs within DATA expressions'  
2290 message\_nl 'end of DATA'  
2300 message\_nl 'unknown procedure'  
2310 message\_nl 'unknown function or array'  
2320 message\_nl 'only arrays may be dimensioned'  
2330 message\_nl 'procedure and function parameters may not be dimensioned'  
2340 message\_nl 'SBASIC cannot put up with negative dimensions'  
2350 message\_nl 'dimensional overflow - you cannot be serious!'  
2360 message\_nl 'error in index list'  
2370 message\_nl 'too many indexes'  
2380 message\_nl 'cannot assign to sub-array'  
2390 message\_nl 'unacceptable array index list'  
2400 message\_nl 'array index out of range'  
2410 message\_nl 'only arrays or strings may be indexed'  
2420 message\_nl 'assignment can only be to a variable or array element'  
2430 message\_nl 'MISTake in program'  
2440 message\_nl 'during when processing'  
2450 message\_nl 'PROC/FN cleared'  
2460 message 'At line '  
2470 message\_nl 'fatal error in SBASIC interpreter'  
2480 :  
2490 set\_message\_header eng\_ms8, 440,13 : REMark - message group 8 header  
2500 :  
2510 message 'To destroy the UNIVERSE, press ' : REMark - To FORMAT the disk, press  
2520 message '\*\*\*\*\* ABORTED \*\*\*\*\*'  
2530 message 'Working memory allocation (kilobytes)> '  
2540 message 'last line recall'  
2550 message 'YNAQ'  
2560 message '..Y or N? '  
2570 message '..Y/N/A/Q? '  
2580 message 'TO '  
2590 message 'exists, '  
2600 message 'OK to overwrite'  
2610 message\_nl 'sectors'  
2620 message\_nl 'Job tag owner priority'

## LANG\_BAS - (cont'd)

```
2630 message_nl 'net aborted'
2640 :
2650 set_message_header eng_ms12, 440,2           : REMark - message group 12 header
2660 :
2670 message 'JanFebMarAprMayJunJulAugSepOctNovDec'
2680 message 'SunMonTueWedThuFriSat'
2690 :
2700 CLOSE #fch
2710 :
2720 :
2730 :
2740 DEFine PROCedure make_ldm (type, group, lang, link, pointer)
2750 LOCAL old_link
2760 old_link = link
2770 link = FPOS (#fch)
2780 IF old_link: WPUT #fch\old_link, link-old_link   : REMark - fill in old link
2790 WPUT #fch\link, type, group, lang               : REMark - fill in type of LDM
2800 pointer = link + 2                               : REMark - link is updated and so is pointer
2810 :
2820 WPUT #fch\((link), 0,0,0                         : REMark - fill in blanks but
2830 :                                                 : REMark - do not change value of link
2840 END DEFine make_ldm
2850 :
2860 DEFine PROCedure set_ldm_pointer (pointer)
2870 LOCAL here
2880 here = FPOS (#fch)
2890 LPUT #fch\((pointer), here-pointer              : REMark - set relative pointer
2900 BPUT #fch\((here)                               : REMark - and reset file pointer
2910 END DEFine set_ldm_pointer
2920 :
2930 DEFine PROCedure set_kbd_header (pointer, lang, size)
2940 set_ldm_pointer pointer
2950 WPUT #fch, lang, 4, size+2                       : REMark - keyboard table follows
2960 END DEFine set_kbd_header
2970 :
2980 DEFine PROCedure set_message_header (pointer, lang, size)
2990 LOCAL i
3000 :
3010 set_ldm_pointer pointer
3020 :
3030 message_table_base = FPOS (#fch)                 : REMark - base of table
3040 WPUT #fch, lang                                  : REMark - set language
3050 message_table_pointer = FPOS (#fch)              : REMark - message table starts here
3060 FOR i = 1 TO size: WPUT #fch, 0                  : REMark - empty table
3070 message_text_pointer = FPOS (#fch)               : REMark - messages here
3080 END DEFine set_message_header
3090 :
3100 DEFine PROCedure message (msg$)
3110 WPUT #fch\message_table_pointer, message_text_pointer - message_table_base
3120 REMark - sets the message table entry and updates the table pointer
3130 PUT #fch\message_text_pointer, msg$              : REMark - put message
3140 IF LEN(msg$) && 1: BPUT #fch\message_text_pointer, 0
3150 REMark - all messages must be an even number of bytes long
3160 END DEFine message
3170 :
3180 DEFine PROCedure message_nl (msg$)
```



## LANG\_BAS - (cont'd)

```
3190 WPUT #fch\message_table_pointer, message_text_pointer - message_table_base
3200     REMark - sets the message table entry and updates the table pointer
3210 PUT #fch\message_text_pointer, msg$ & CHR$(10) : REMark - put message + <NL>
3220 IF NOT (LEN(msg$) && 1): BPUT #fch\message_text_pointer, 0
3230     REMark - all messages must be an even number of bytes long
3240 END DEFine message_nl
```

# A PEEK at QLTOOLS

Huber Heights, Ohio, USA - Tim Swenson



Getting data to and from the QL and MS-DOS has been fairly easy for a while. There are a number of QL programs that will read and write an MS-DOS disk. Sometimes it's more convenient to be able to have MS-DOS write to a QDOS disk, then there are computers which the QL does not have the software with the abilities to read them.

A program has been written to solve these problems, QLTOOLS. A Freeware C program designed to be compiled on almost any platform. The distribution ZIP file for QLTOOLS comes with executables for both MS-DOS (NT, OS/2, Win95) and Linux (a Unix-clone). QLTOOLS has been compiled on the Amiga, Mac's and different flavors of Unix. The current version of QLTOOLS is 2.2. This program easily writes files to a QDOS disk. Reading files from QDOS is supported but it takes a little more work. It can even convert an MS-DOS or Linux disk into a QDOS disk. QLTOOLS supports both 720K and High Density (HD) disks. It does not support ED disks, which really are not supported in MS-DOS or Linux. A major fault of QLTOOLS is its interface. It is a command line-only driven program. To get a directory of a QDOS disk in drive A: you would enter the following command:

**QLTOOLS A: -D**

Once you have a directory, if you want to copy a file from the hard drive to the QDOS disk you would enter:

**QLTOOLS A: -W FILE.EXT**

This weakness is also a strength. A command line-only interface allows a program to be automated by a BATCH file or a Unix shell script. QLTOOLS was designed from the ground up to be a Unix/MS-DOS program and it gets a lot of its design from the Unix world.

As weak as it may be on the interface, it is strong on its capabilities. QLTOOLS can automatically translate the dot of MS-DOS (FILENAME.EXT) to the underscore of QDOS (filename\_ext). The -T option allows the user to either turn this feature on or off. QLTOOLS can display a disk map and cluster dump for those really into the nitty gritty of the disks. QLTOOLS can even take a QDOS executable file from MS-DOS, put it on a QDOS disk, add information about the files dataspace, and turn it back into an executable. When using the -D option to do a directory and will show which files are executable and their dataspace.

Copying a file from QDOS to MS-DOS would not be obvious to the non-MS-DOS person. The -N option copies a QDOS file to standard output (STDOUT). STDOUT is usually the screen. Using file redirection ( either MS-DOS/Unix) you can copy the file to disk:

**QLTOOLS A: -N FILENAME\_TXT > FILENAME.TXT**

The > symbol tells MS-DOS to send the output of the QLTOOLS command to a file instead of the screen. As convoluted as this may sound, it's standard Unix practice, and it works. It comes with the source code so you can port and compile it on almost any computer system that you want. Since most people will use it with MS-DOS, an MS-DOS executable comes with the distribution.

QLTOOLS was originally written by Giuseppe Zanetti, with contributions from Valenti Omar (2.01), Richard Zidlicky (2.02), and Jonathan Hudson (2.1 & 2.2). It is available from the FTP server "maya.dei.unipd.it" or from PD and Shareware Libraries.

**Forget!**  
the QL keyboard membrane shortage.

**Forget!**  
the QL keyboard problems.

**Here!**  
for the QL, is a low cost, small, simple yet comprehensive keyboard interface

*Note This product is suitable for connection to most IBM AT style keyboards. Compatibility with other, older or multi-system keyboards is uncertain.*

## Amadeus Interlink

Share system resources, link computers, printers and real sound interfaces to a common network where QL's and PC's can talk to each other and share system resources. Up to a staggering 255 network interfaces can be connected.

More than one printer? no problem, any printer connected can be accessed by any linked computer. The multi-tasking QL for instance can effectively print to more than one printer at a time.

Transfer files between computers at high speed (*basic system software supplied contains a command 'AMACOPY' on both DOS and QDOS that enables file transfer between any linked machine.*)

Sound - enhance your programmes to include verbal prompts and even musical interludes. Sound files are computer independent and may be transferred between any linked machine.

Straight forward, low cost, simple, fast networking from Di-Ren connects your QL to the Real World!



Ama-Sound Interface

Stop press - Amiga on-line soon

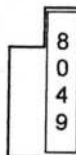
## QL Network Prover

All time best seller from Di-Ren, this little box simply plugs in-line with your QL-QL network lead. An LED on the box indicates network operation thus keeping you informed of *what actually is happening!* Only £4.00

Post/Shipping: UK £1.50, Elsewhere £2.00

## Features

- Low Cost - only £32.50\*
- Suits 101/102 key IBM AT style keyboards
- Keyboards available (*from £18.00*)
- Easy Fitting
- Most keys translated to QL formats
- Keypress record/playback facility
- External keyboard lock facility
- Small size



**For the price of two keyboard membranes, an interface that will last a lifetime!**

### Prices

Interface	£32.50
Soft Touch keyboard	£18.00
Tactile keyboard	£24.00

### Post/Shipping:

	Interface	+ keyboard
UK	£1.50	£4.00
Europe	£2.00	£5.00
Elsewhere	Enquire	

## Micro Process Controller (MPC)

Control any electrical appliance from this unit. It plugs in-line between your computer (or Amadeus interfaces) and a parallel printer. Two units can be connected in series if no printer attached.

These units each house 6 make/break relays capable of handling DC and AC voltages of up to 240V AC @ 3 Amps and are easily controlled from software. Units are housed in a smart black ABS box, within which connections are made via fused screw terminals.

The controllers may be powered from a 9 Volt battery for very low usage applications. Alternatively a low cost 12 Volt DC unregulated PSU can be used. Output of the PSU should be at least 250mA for each unit attached. Suitable PSU's for UK use are available from Di-Ren

MPC Without PSU	£59.95
MPC with PSU (UK)	£65.50
UK PSU (500 mA)	£ 8.50
Postage UK	£ 3.00
Postage elsewhere	£ 4.00

## Di-Ren

For further information contact us direct or visit our Internet site:  
<http://www.forthrt.com/~di-ren/products.html>

Di-Ren  
59 William St  
Walsall  
WS4 2AX, England

Tel/Fax +44 (0)1922 33580  
Email 100736.1316@compuserve.com

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## QL-PC Fileserver II

Original Features retained

- ⇒ Connection to the PC's DOS Drives (including networks and CD ROMS)
- ⇒ Optional automatic conversion of Text Files for editing by either machine
- ⇒ DOS sub directory handling
- ⇒ DOS Read/Write attribute handling
- ⇒ Automatic recognition of native QL files (allows QL programmes to be Exec'd etc. from DOS drives)
- ⇒ Works in background on QL & PC.

### New/upgraded features

- ⇒ Access DOS devices, e.g. LPT Ports, Keyboard etc.
- ⇒ Remote SCR and CON type text screen operation on PC display with colour, window and mode support
- ⇒ Up to 8 display screens on the PC can be operational and easily switched between from the QL.
- ⇒ Read PC screen data directly into the QL
- ⇒ Full QL filename lengths supported with options to rename drive names.
- ⇒ Advanced RS232 Comms handler for PC implemented as a DOS Device Driver (similar to QL SER device drivers).
- ⇒ Connection to PC via Serial links, Amadeus Interlink or any other suitable linking mechanism.

Price: £35.00

Upgrade from version 1 for just £7.00 + return of original masters.

## Di-Ren Infolink newflash

Amadeus System software may now be downloaded directly from our Internet Site.

Check out:

<http://www.forthrt.com/~di-ren/amadeus.html>

# *An Affordable Keyboard Interface*

*Wimborne, Dorset, ENGLAND - Derek Pope*

I was pleased to see Di-Ren's new 'affordable' keyboard interface on the front cover of the last issue of IQLR and the advert on the back was informative but with cover to cover coverage (if you'll pardon the expression) I was disappointed to see no article within! *(Editor's Note: At the time issue #4 went to press this was a NEW item with very little time for feedback from users.)*

My first introduction to the Di-Ren interface was in the September edition of the Quanta magazine which I received just prior to the Solent group workshop at the Horizon Centre in Portsmouth (England).

I took along an old 102 PC style keyboard (the type with a round connector) I had bought at the local Hamfest for five pounds (thanks to I.M.Gaye for reminding us of these Amateur Radio events), arrived at the Di-Ren stall and said "If your interface works with this keyboard, I'll buy one".

## ***It did, and I did, and I'm very pleased with it!***

Now just for the record, I actually quite like the QL keyboard, think it's easier to use than the standard PC layout and I had got used to it over the years. Like many other QL enthusiasts, I use a PC at work as does my wife and it seemed less confusing for other members of the family not to have to remember CTRL-left to backspace etc.

Fitting the interface was (almost) a doddle, [best if I don't repeat the instructions and confuse the method] but I had three problems:-

- 1). The removal of the 8049 (actually a Hermes chip) without a suitable tool.
- 2). Fitting the small board due to the encroachment of mdv cables into the space it's intended for.
- 3). Trying to refit the 8049 (Hermes) into the holder without my glasses on!

Problem one was overcome by bending the end of a flat bladed screwdriver and using this to lever out the chip, in my view any installation process requiring a special tool should provide the tool, give details of where to obtain one or show details of the tool required. Problems two and three were overcome by removing the mdv (which doesn't work anyway) and leaving it out of the QL. Only my JS QL seems to have these mdv cables tucked round the corner past the 8049 chip so most people may not have any difficulties fitting the interface and continuing to use the mdvs.

The keyboard interface seems to be quite robust (I dropped it on the floor immediately after purchase) and works very well. The early version which I bought did not permit the use of the QL keyboard in parallel and seems to have a confusion in the meaning of the jumpers on the board (see below).

I understand that later versions of the interface permit the QL keyboard to remain connected (if the fitter has the necessary manual dexterity) and I imagine the confusion of the jumpers is resolved as well.

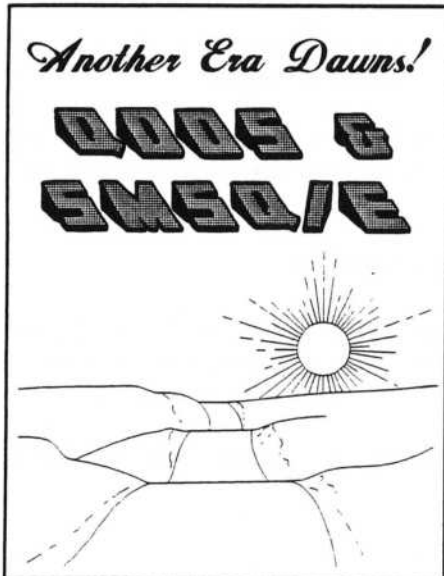
After fitting the interface the user has to configure two jumpers labelled C1 and C2. C1 provides for physical 'locking' of the keyboard (for anyone using a PC case with that facility) whereas C2 provides two connection alternatives to cater for 101 (US) or 102 (UK) keyboards.

The confusion came because the instructions told me to connect C2's connectors 1 and 2 for a 102 key keyboard or 2 and 3 for a 101 key keyboard. I connected 1 and 2, put the QL back together and all of the normal keyboard worked fine but some of the 'special character' keys like hash (#) were in the wrong place.

I also found that pressing the '5' on the numeric keypad with numlock off (which should return a 2 to indicate a 102 key keyboard - don't worry it gives a 5 in numeric mode) actually gave me a 1. Needless to say I swapped the setting of C2 to join pins 2 and 3 (which should be for a 101 key keyboard) and everything works OK except that the 5 on the numeric keypad now gives me a 2 whereas it should give a 1. I haven't bothered to contact Di-Ren about the confusion of these settings because I assume many other purchasers have already done so and with only two options it's was fairly easy to guess what the problem was. As I said above, I expect that this is all sorted out in the later versions of the documentation.

## *An Affordable Keyboard Interface - (cont'd)*

All of the PC keys work in the ways you would like them to on the QL, the designer has done a very good job of mapping things to where we would all want them to be and have even provided an option to switch the meaning of the insert key between two standard requirements - see Di-Ren's advert for more information. I could never see the point in paying out 75 pounds for the old keyboard interface plus the 25 pounds for a keyboard but at 32.50 for this new interface and a fiver for the keyboard this is very good value for money and I wholeheartedly recommend it.



## *Notes & Jottings*

*Newport, Rhode Island, USA - Bob Dyl*

As the graphic to the left attests "Another Era Dawns" on the QL community, in fact referring to the QL community really only specifies one area, thus the graphic states QDOS and SMSQ/E. WHY ? The answer is simple, QDOS, SMS, SMSQ and SMSQ/E in one form or another are operating on a multitude of platforms i.e. Atari, Amiga, Mac , PC's and QL's. What will the New Era be like?? Will it be Miracle less?? What about the EU directive?? All very good questions.

First, lets look at Miracle Systems, Stuart Honeyball shocked many in the QL world (used in the broader sense) when he stopped production of the QXL and Super Gold Card. Does this mean the end of Miracle Systems ?? Again, the answer is NO. Stuart is writing and developing NEW products that will be EU compliant . The first of which will be the "The QXL GOLD" he is also reported to be developing a 68060 (or newer processor) PCI card that will run SMSQ on lightning speeds on a PC. Stuart is dedicated to our community and will continue to be active. What will change is the fact that he most likely will not be developing new hardware for the QL as we know it today. He, like many others, believes it's the operating system that makes our community so unique, not the hardware its run on.

On a personnel note, we would like to thank Stuart for his many efforts in behalf of IQLR, we'll miss him as our subscription agent in the UK. At this time we would like to welcome our new subscription agent Robin Barker of Di-Ren , please note the changes on page 2 of this issue.

Second, let's look at the EU directive. As an American we have been importing hardware from the UK and Europe since the early days of Sinclair Research, NONE of which was or is FCC compliant. Our regulations tend to ignore the relative small amounts we would acquire. The major concern seems to be with the mainstream types that sell in large quantities. As new regulations are issued most all items of the particular catagory are usually "GRANDFATHERED" meaning that the new regulations do not apply. It seems to be a very REASONABLE approach. At this time, the agencies that are supposed to enforce the EU directive don't seem to have their act together. We'll just have to wait and see.

***IQLR has received assurances from the MAJORITY of QL hardware suppliers that they will continue to produce their products after 1 January 1996.***

Third, as far as the future is concerned, we see no let up in the furious product development we have seen in the last few years. The long awaited graphics card will finally see the light of day. It will be produced by the team of R. Dunnett and Z. Nastasic (Nasta) as part of their promised new motherboard, with increased resolutions and up to 256 colors (I can't wait for this one - both Mel Laverne and I are sitting on 15" Black SVGA monitors). The Super Gold Card will go into limited production as a Quanta project (I suggest you get a hold of a Quanta committee member and reserve yours now - you'll need it to take full advantage of the card mentioned above).

In closing, the Doom Sayers have been predicting our demise ever since the take over of Sinclair Research by Amstrad, then came the closing down of QL World and now the EU Directive. In the past we survived and prospered, to their amazement, and you know, we are doing it again.

# QXL In Command

Bedford, Massachusetts - Pylesville, Maryland, USA  
Al Boehm and Tom Robbins

## The Best of both worlds!!

The font technology and text formatting capabilities of Windows and OS/2 word processors is, to be truthful, superior to Quill and Perfection (I have not tried TEXT 87). However, my (Tom) experience is that I get so distracted by these features that it seriously detracts from my ability to effectively compose a message - the form starts taking precedence over the content.

For us both the most effective composition technique is writing in the QXL mode then transferred the text over to the IBM mode using Dilwyn Jones' public domain "Stripper" or saving a Quill document by "Printing" it to a ram file then to a IBM format disk. Then use the fancy PC/Window programs to add flash!

Also if you are preparing a message for Email, it is much more likely to come properly formatted out the other end if it was originally done on the QXL. Those fancy PC word processors add a lot of embedded code that Email can't handle. The only drawback against using the QXL for composing was lack of a thesaurus, but now there is one! More on Turbo/Qliberator: Sbasic is faster then Superbasic and the QXL is a lot faster then a QL. Even so, Turbo compiled programs are still faster! Here is a simple timing routine:

SBasic (QXL)	MicroSoft QBasic/QuickBasic
100 m=1:k=3:l=7	m = 1: k = 3: l = 7
120 PRINT DATE\$	a = TIMER
130 FOR i%=1 TO 1000	FOR i% = 1 TO 1000
140 FOR j%=1 TO 1000	FOR j% = 1 TO 1000
150 m=m	m = m
160 END FOR j%	NEXT j%
170 END FOR i%	NEXT i%
180 PRINT DATE\$	PRINT TIMER - a
190 INPUT a\$	

This is what I call a 1 million operation overhead program, it times the setting up of loops, etc., which simply replace m with itself one million times. In the next run, line 150 is changed to m=k+l. The difference between this time and the first overhead run, is how long it takes one million additions. Finally, line 150 is change to m=k\*l to see how long a million multiplications take.

DATE\$ is used instead of DATE because DATE won't compile in Turbo! The QBasic TIMER is similar to DATE. Line 190 is needed to keep the compiled (Turbo and Qliberator) run screens active until ENTER is pressed.

MicroSoft QBasic runs as an interpreted basic like SBasic. MicroSoft QuickBasic can run both ways but here is compiled. The IBM PC results are from my 486 33MHz machine without a numeric co-processor but with a reasonably clean configuration. As such, timing can be considered near the average PC. However, times will vary widely on PCs with different configurations and, of course, CPU speeds. The times I got in seconds were:

	SBasic	Qlib	Turbo	QBasic	QuickBasic
Overhead	11(9)	10(7)	7(6)	54	39
add	23(18)	18(13)	14(10)	107	67
multiply	29(22)	31(23)	26(18)	109	69

The times in parenthesis are for a special QXL running at 25MHz and with fast memory. Compiled Turbo is still the fastest but not by much when compared with SBasic. I did this same comparison years ago with the Thor XVI and a plain QL and Turbo was much faster then SuperBasic. Now SBasic interpreted is nearly as fast. These results are useful for heavy duty number crunching of which I do a lot. When screen operations and file access are taken into account SBasic looks even better.

## *QXL in Command - (cont'd)*

I don't know why Qliberator was so slow for multiplication; for some more complex operations, e.g. Cosines, it compares better. Also Qliberator compiles most of SBasic. Turbo has a lot of problems with certain Keywords. Also a lot of the Turbo demo routines don't work on the QXL.

What's an ATAN? SBasic has a new math function, ATAN(x,y), an arctangent with two arguments. What good is it? It returns a full circle of angles while ATAN with one argument only returns value in half of a circle. Suppose you walk x steps east and y steps north, what direction did you go? ATAN can calculate it,

```
DEFine FuNction AZIMUTH(x,y)
d=DEG(ATAN(y,x))
if x>= 0 then return d: ELSE return 360 + d
End Define
```

There are two problems that don't allow just using ATAN directly. First the azimuth angle is usually measured from North clockwise, but the mathematical convention is from the x direction (here East) counterclockwise. Simply reversing x and y takes care of that neatly. The other problem is that ATAN give answers (when converted to degrees by the DEG function) from -180 to +180 which is correct but a navigator expects 0 to 360. Hence, the IF statement, adding 360 degrees (a full circle) doesn't change the actual angle you'll recall but does put it in the expected range. Hey, AZIMUTH is fine for distances up to several miles, but a more complicated formula is needed when the earth's curvature has an effect.

# *The Great Pizza Challenge*

*Le Grand Pressigny, FRANCE - Tony Tebby*

Having read Zelijko Nastasic's pizza challenge (how many windows can you open?) in Volume 5 issue 4, I set the same problem to my second year students, but with more stringent control (size of window, maximum delay for any window operation, etc.) leaving them a free choice of computer system. Despite a year of indoctrination not one student chose to try it under UNIX, not even on a giant server. Only one tried OS2. AmigaDOS did quite well on a Amiga 3000 provided that you did not try to edit a file. I modified my SMSQ/E to allow more than 120 jobs and, under the specified conditionns, I had 103 copies of QD (209 jobs total).

The best results came from a 130 MHz Pentium with 16 Mbytes of RAM and RAM DOUBLER. Under Windows 3.11 - 75 editors, Windows 95 - 109 editors, Windows NT - 36 editors. All three stopped with out of memory (with a virtual memory operating system???) and Windows NT also ran out of steam: it really needed a faster processor. This confirmed Windows NT's reputation as being almost as bad as UNIX but also revealed that there are some people who can squeeze a bit more out of a PC than others.

# *The Brighton QL Show*

The first QL Show and Quanta Workshop of 1996 will be held on the 28th of January from 10am until 5pm. The venue for the show will be:

The Sackville Hotel  
Kingsway  
Hove, Sussex  
UK

For addition information, please contact: Roy Wood at: 01 1273 430372 or fax at : 01 1273 381577

# Professional & Graphical Software

Amelia Iowan Old Style **BREMEN BOLD** Kuenstler 480 ∞ΔΓαβ Goudy Handtooled  
 Caslon Opera **PROforma fontpack** Bodoni  
 Revival 565 **SHOTGUN**  
*Shelley Alley* **Staccato SSS**  
 Venetian 30: **agull Bold**  
 Calligraphi **iel Gothic**  
**Carmina** **ITALIC** **Uppercase** **INFORMAL** **UI** **Lyudani** **UMBRA** **GREENKUM** **591** **Allegro**  
 Old Broad **AI** **7.7** Goudy Old Style Freeform 721 Dom Casual Amerigo Carmina Italic

## LINEdesign

With LINEdesign, you can create artistic drawings, technical drawings, process bitmaps (even scale and rotate them!), and any kind of vector drawings. You can draw lines, curves, circles, ellipses, pies, squares, rectangles, rectangles with rounded corners, and any combination of these to create the most fabulous drawings ever seen. Because LINEdesign is a vector drawing program, any part of the picture can be moved, scaled, rotated, slanted without any loss of precision or resolution. In LINEdesign, pictures are device independant, meaning that the printout will be the same on any printer (e.g. same size and position). Also LINEdesign is good at handling text. You can easily put titles and full paragraphs on the page. You can choose from a large variety of fonts (you get 130 with the program), and they can be displayed at any size, rotation, etc. If the fonts which are given with the program are not enough for you, there is a special program to convert Adobe Type 1 fonts for use by LINEdesign (pfb2pff). LINEdesign is a drawing program, but it can also be used by people who are not good at drawing. LINEdesign is a great program for making leaflets, posters, and any kind of printed work. To add a graphical touch, you get about 150 clipart pictures, including banners, borders and general purpose drawings. LINEdesign will reproduce everything at the highest possible quality! LINEdesign is delivered with an extensive manual, which includes a full printout of all the fonts and the clipart given with the program.

## PROforma

PROforma is a vector graphics library. It is very powerful, and can be used for any application which needs high quality output. PROforma is used by LINEdesign, PFdata and PFlist to produce the output. PROforma supports black and white vector graphics and includes:

- \* clipping paths
- \* transformation matrixes
- \* grayshades, (thick) lines and bezier curves
- \* filling using even odd and winding rule
- \* vector (outline) fonts, which can be used in any size. Hinting is used to make sure small fonts look good.
- \* true WYSIWIG. PROforma can generate output for screen and printer, and the output will be exactly the same on both (with any difference due to difference in resolution).
- \* bitmaps. Although PROforma is a vector graphics library, you can include classic bitmaps so you can still use your old graphics.

PROforma (API) package is supplied with a comprehensive manual and examples.

**pfb2pff** This program allows you to convert Adobe Type 1 pfb fonts for use by PROforma.

## DATAdesign

Never before has it been so easy to create, fill in and maintain your personal databases. To start a new file, just type the names of the fields. To add or delete a field, no problem, just do it. To change the name of a field, just indicate it.

What's more you can choose to look at only those fields you want, and in any order you specify. And you can select which records you want to view, and which not.

DATAdesign allows you to have some hidden comments for each record, have a general look at the file (in tabulated form) or to transfer a record into the scrap or hotkey buffer, so you can easily import a record in your favorite word processor or editor!

Security is a strong point for DATAdesign. Usually files will be memory based, for maximum speed. Files can also be disk based, making sure all changes are immediatly stored on disk, so even in the event of a power failure, you can at most lose the changes to one record!

Naturally, DATAdesign is good at sorting and searching. And if you were using another database, you can convert Archive or Flashback files to DATAdesign.

### DATAdesign API

Using the API, programmers can unleash the real power of the DATAdesign engine, getting a relational database with a bonus, you don't even need a key field. The API gives you a unique and powerful record at a time data manipulation extension to the language you already use.

### PFdata

Interesting program for all DATAdesign owners, to create hardcopy of your DATAdesign files using PROforma. You can use a large selection of fonts, in any requested size. Also LINEdesign pictures can be included to add logo's, boxes, etc. Several records can be printed on each page,...

### PFlist

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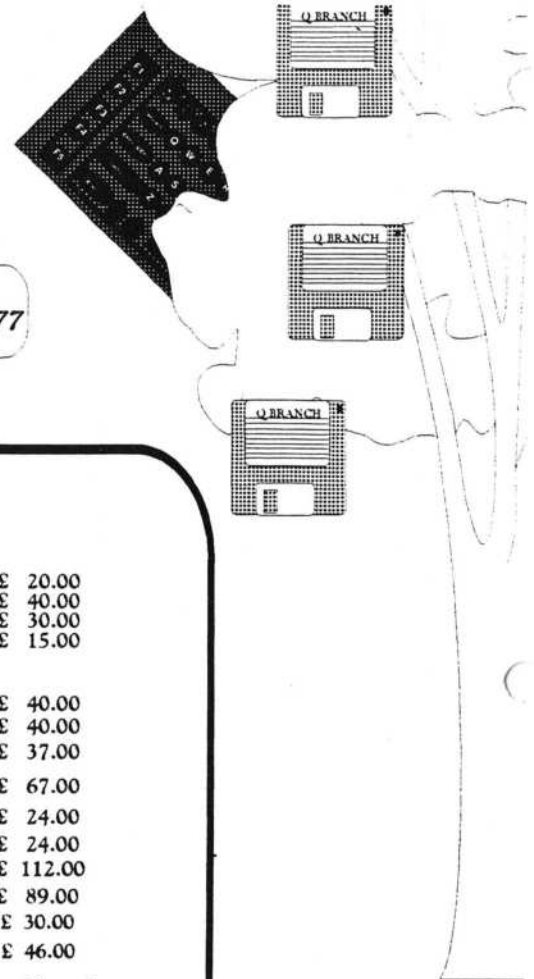
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